

THE MICHIGAN FARMER,

A WEEKLY JOURNAL OF AFFAIRS

Relating to the Farm, the Garden, and the Household.

NEW SERIES.

DETROIT, SATURDAY, JANUARY 8, 1859.

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The Michigan Farmer,

R. F. JOHNSTONE, EDITOR.

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The MICHIGAN FARMER presents superior facilities to business men, publishers, manufacturers of Agricultural Implements, Nursery men, and stock breeders for advertising.

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CONTENTS.

Agricultural College, Report of the Board of Education.	9
Wool, its structure and properties, illustrated.	9
Large Cattle vs. Small Cattle.	10
Southdown Sheep.	10
Wintering Hogs.	10
Sorghum Growing.	10
Profitable Wheat Growing.	10
How the Potato Disease Spreads.	10
Stock Diseases.	10
Shorthorns of Messrs. Fox and DeGarmo.	10
Devons.	11
Prichard's Young Duke of Devon.	11
Horticultural Penetrations among the Gothamites.	11
Culinary Vegetables.	11
Horticultural Notes.	11
Hyacinths—Phloxes—Treatment of Orange Trees.	11
—Twelve good Hollyhocks—Sikhim Rhododendron—New Pench—Wash for Insects—New Hardy Fumaria—California Strawberry—The Paulonia Flowers.	11
Notes from Berlin.	11
Poultry.	11
Preparations for spring.	11
FOREIGN AGRICULTURE.	12
The Agriculture of Austria.	12
Early Potatoes in England.	12
Bitting Ladies' Horses.	12
Mr. Peyton Johnson's Swine.	12
Utility of Stump Pullers.	12
Uses of Stone.	12
Weight of Hogs.	12
A Cheap Ice House.	12
Inquiries about Flax.	12
Our Second Number.	12
State Agricultural Society.	12
Home Productions.	12
Look at the Wool Markets.	12
New Books.	12
History of the Agricultural Press of Michigan.	12
Scientific Intelligence.	12
State Legislature.	12
POETRY—To three Sisters.	14
The Rose-bush.	14
Notes from the Country.	14
Reforming the Wolverines, Chapter II.	14
Household Receipts.	15
A Paris Sunday.	15
To Farmers' Wives.	15
Household Varieties.	15
Riddles and Enigmas.	15
The Markets.	16

The Farm.

The Agricultural College—Report of the Board of Education.

The State Board of Education have made a report to the Legislature, which we copy below, and they have appended to it a very full and excellent report from the President, in answer to a series of inquiries which were adopted by the Board and sent to that officer. The report of the President will be published next week.

ANNUAL REPORT OF THE STATE BOARD OF EDUCATION.

The Board of Education, though not required by law to make specific Reports, deem it becoming and proper to submit annually a brief statement of their acts in the management of the important interests confided to them.

We herewith transmit the printed Reports of the Secretary of this Board, and of the President, Secretary, and Treasurer of the Agricultural College, found in the recent Report of the Superintendent of Public Instruction, pages 325, 368, and the Report of the Principal of the Normal School in the same volume, pages 369, 373, to which we would refer for particular and detailed information in reference to each of these Institutions.

The Normal School and Agricultural College being especially under our charge, we will, in addition to the above Reports, present a brief statement of their present condition, the amount at our disposal for their future support, and indicate the legislation we deem essential to their continued success.

THE NORMAL SCHOOL.

This Institution, (as will be seen by the Report of the Principal, to which we refer,) is in a highly prosperous condition. It is supported in part by the revenue derived from an appropriation of Salt Spring lands, and in part by annual appropriations by the Legislature. No material changes in its policy or management are deemed necessary or advisable for the ensuing two years; and the usual appropriation of from six to eight thousand dollars per year, in addition to the fund derived from the Salt Spring lands will, we think, be sufficient to meet its absolute wants.

THE AGRICULTURAL COLLEGE.

This Institution being recently established, in a comparatively new and unsettled portion

of the State, on a tract of land entirely uncultivated, and on a basis essentially different from any existing College in the United States, being in fact, the pioneer Institution of the kind in this country, and at best, but an experiment—has been a source of great anxiety, and in its development has required the expenditure of an amount exceeding our anticipations.

The amount appropriated to the Agricultural College for the purchase, clearing, and improvement of land, erection of buildings, procuring stock, and maintaining the College, which has been in successful operation for nearly two years, has been as follows:

Proceeds of Salt Spring lands	\$56,820 00
Appropriation of Feb. 16th, 1857	40,000 00
Expenditures, beyond appropriations raised	13,283 95

\$109,603 15

For particulars of these expenditures we refer you to Reports of the officers above cited, and to the Reports of the President and Treasurer of the College, herewith submitted.

It will be perceived that the expenditures and indebtedness exceed the appropriations and receipts \$13,283 95. This has arisen in part from erroneous estimates and unforeseen contingencies—among which might be named the unprecedented rise in value of all kinds of property and labor while the buildings were in progress and the improvements being made—and in part from defects in the buildings, subsequently reported, that could not be remedied without an unexpected outlay, for which we had made no provision. In making estimates for buildings and improvements, it was supposed that enough had been reserved to carry on the Institution until the close of the present year; and until further appropriations might be reasonably anticipated. But unforeseen contingencies arose, and latent defects in the buildings were developed, rendering it indispensable, in order to preserve the property of the State, and prevent serious loss, to use upon the buildings the amount reserved for the current expenses of the farm and College. This left us, at the commencement of the year 1858, entirely destitute of funds; but believing that the existence of the College and the preservation of the property, as well as the best interests of the State, required it, we made such arrangements as have secured its uninterrupted and successful progress. In doing this, we had to assume a responsibility we would gladly have avoided; but the result has, we think, fully vindicated the policy adopted; and we look with confidence for legislative approval, and appropriations to meet the deficiency, and to provide for our future wants.

We have at present, accommodations for but sixty students; but these are made by the necessities of the case, to answer for one hundred. The number of applicants, judging from experience, will far exceed any accommodations the Institution will be likely to possess, exclusive of the numerous applications from other States. In our opinion, provision should be made as soon as practicable, for the accommodation of at least two hundred students; to do which some additional buildings will be required, and also, an increased number of Professors. We would suggest also, the modification of the organic law of the Institution, requiring one of the Professors to act as Secretary.

Appropriations will be required by the next Legislature for the following purposes:

1. To meet the present indebtedness	\$13,283 95
2. Salaries of Professors, Steward and Farmer, for 1859	7,500 00
Same for 1860	10,000 00
3. Farm barn—if wood, \$3,000—brick, 5,000 00	
4. Barns for Professors, and for Farmer, 2,000 00	
5. Boarding House	10,000 00
6. Hall for Students	16,000 00
7. New roof for present boarding hall, and repairs, replastering, &c., for two years	4,000 00
8. Expense of boarding house over and above receipts, \$2,500 per year	5,000 00
9. Contingencies, including addition to stock, farming implements, tools, furniture, fruit trees, expenses of Board of Education, &c.	5,000 00

Making for two years for which the coming Legislature must make provision, an aggregate of.....

76,783 95

Though the amount is large, it will be perceived that the principal portion goes toward permanent improvements actually required, and which it would be poor economy on the part of the State, either to postpone, or inadequately to provide for. All structures erected for the accommodation of such an Institution, should in our opinion, be substantial, capacious and convenient; erected whenever required to meet present wants, but also planned and proportioned with reference to its prospective growth and development.

This College may, and we confidently expect will eventually be made, to some good degree, self-supporting; but this cannot be, until the necessary buildings shall have been erected, and the farm improved, so that the labor performed may be made available for its support, and not be, as has in the main, been the case hitherto, only an investment in the permanent improvements of the estate.

A Resolution of inquiry was addressed by

our Board to the President of the Institution, which, with his reply in full to the questions propounded, is hereto annexed.

In our recommendations, we have confined ourselves to what we deem essential; and which we believe the Legislature, having in view the best interests and prosperity, as well as the good name of our young and rising State, will readily grant.

All which is respectfully submitted.

JOHN R. KELLOGG,
GEORGE WILLARD,
W. J. BAXTER,
IRA MAYHEW,
State Board of Education.

OFFICE OF SUP'T. OF PUBLIC INSTRUCTION,
Lansing, Mich., Oct. 28th, 1858.

HON. J. R. WILLIAMS, Pres't. Agr'l. Col.

DEAR SIR:—At the late meeting of the Board of Education the following resolutions were adopted:

"Resolved, That the President of the Agricultural College be requested to prepare and submit to this Board by the first of December next, a brief Report, embracing the following particulars:

"1st. The amount expended for the Agricultural College from April 18th, 1858, to date of the Report, and an estimate of the necessary expenditures for the Institution to Jan. 1st, 1859, with a particular statement of items and objects.

"2d. A full statement of the indebtedness of the Agricultural College up to Jan. 1st, 1859, including all amounts due for balances, giving items and particulars.

"3d. Needed repairs before January 1861, and the estimated cost thereof.

"4th. Additional Professors required.

"5th. A map of the Farm, indicating, so far as practicable, surface streams, improvements, buildings, &c., &c.

"6th. Necessary building and improvements required before January, 1861, including plans for buildings, their location, and the estimate cost of their erection, having in view the accommodation of at least two hundred students, with the estimated cost of each improvement.

"7th. A detailed statement of the appropriations required to meet the wants of the Institution for the same length of time.

"8th. Any further suggestions deemed of importance to the success of the Institution.

"9th. Legislation required to promote the interest of the College."

Respectfully Yours,

IRA MAYHEW.

On the Structure and Properties of Wool.

The effects produced by crossing the breed of sheep considered, and practically demonstrated.

BY HENRY GOADBY, M. D.

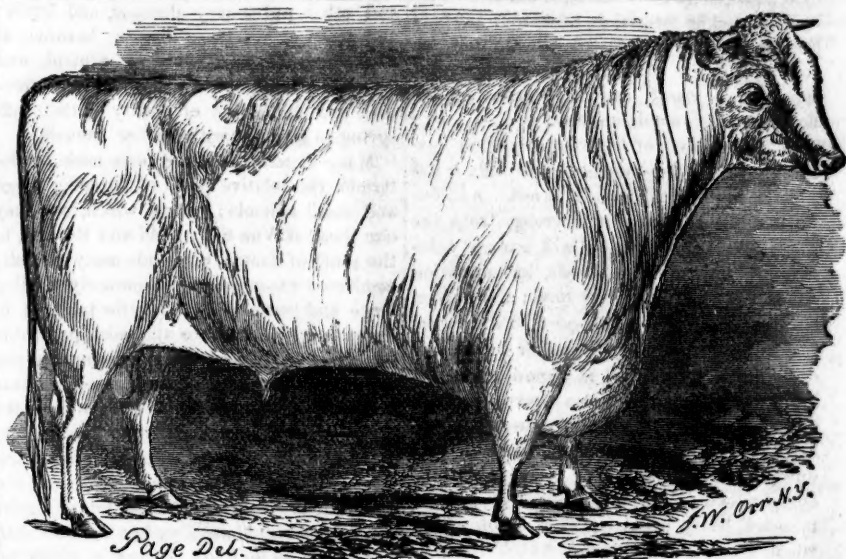
PROFESSOR OF VEGETABLE AND ANIMAL PHYSIOLOGY, AND ENTOMOLOGY, IN THE STATE AGRICULTURAL COLLEGE OF MICHIGAN.

The critical examination of wools, is a much more serious undertaking than would at first appear. It requires the devotion of time, considerable labor, and the severe inspection of a great number of specimens.—The wools examined for the purpose of this paper have exceeded 150, and out of this number nearly 80 have been mounted as permanent preparations. They include the following varieties:

Pure Blood.—Silesian, French, Spanish, Saxon, Southdown, Leicestershire; with crosses from all of these. They were contributed by Messrs. Gillett, Peckham, Schuyler, Yerkes, Dickey, Butterfield, Calkins, and Thompson, of Michigan; Brayton, Hiney, and Starr, of Ohio; Patterson, of N. Y., and many others whose names were not appended to their contributions. Some of these wools came from stock imported by the contributor; one sample of wool, was imported from Saxony, by Mr. John Hiney, of Columbiana, Ohio; another was taken from a favorite sheep, imported from the flock of the King of Saxony, known as "Old Seventy," the property of Mr. Hiney; and a third sample was obtained from the sheep that took the first premium at the Ohio State Fair, 1858.

The object of the enquiry has been to ascertain firstly, the structure of wool; secondly, the best kind of wool; thirdly, what crosses produce the best staple; fourthly, whether *breed* or *feed* is to be regarded as the most important element to the attainment of perfection; fifthly, the influence of sex, age, and condition; and lastly, whether imported good breeds deteriorate or improve in this country.

Wool, which may be regarded as the hair of a sheep, does not differ in structure, from this tissue in any other animal. Hair usually consists of two or three distinct tissues; these are a cortical or horny layer, with an internal medulla or pith, which forms its central axis,



The celebrated premium Shorthorn bull owned by R. G. Corwin of Lebanon, Ohio.

and to these in the higher animals is superadded a third—an external cuticular layer.—This last layer when present consists of a number of epidermic scales, which are thrown off or exfoliated from the interior of the sac, bag, or follicle out of which the hair grows. These scales can be readily detached by treating hair in diluted caustic soda. The cortical substance is a tolerably compact horny tissue, remarkable for the exhibition of longitudinal lines, when examined under certain circumstances by the microscope; it also possesses dark spots, dots, or streaks, which are chiefly granular pigment, cavities filled with air, or fluid, or nuclei. The medulla, or central streak, or axis forms but a small portion of a hair: in shape it is cylindrical and filled with cells; a function of these cells is to secrete a paint or pigment, which contributes to give color to the hair. Hair becomes gray when the cells have lost their capability to secrete coloring matter, or pigment, and for other reasons not well understood.

The external surface of wool more nearly resembles the external surface of human hair than any other tissue with which it can be compared. To exemplify this fact, the hair of an infant one hour old examined by the same magnifying power, and carefully drawn to the same scale as the wools, is given in fig. 1.

Here all that can be seen is simply the outer surface, entirely composed of a vast number of flattened epidermic scales, which overlap each other from the bulb to the point, like the arrangement of shingle on a house-top: it will also be noticed, that the hairs of this very young subject are not symmetrical, some of them being much larger than others.

Wool is a very difficult tissue to examine, when its elementary structure is the object of the investigation; its external cuticular layer is so remarkably dense, that, examined in the ordinary way, it effectually conceals all traces of other tissues, and appears to be perfectly homogeneous, but if recourse be had to chemical re-agents, whereby the cuticular layer can be altogether removed, if its action be continued sufficiently long, or, under any circumstances, rendered so diaphanous, that anything beneath it can be readily seen, a very beautiful and interesting sight will present itself. Caustic soda, more or less diluted, appears to be the best preparation for this purpose; macerated in this fluid, for two, three, four, or more hours, depending on the amount of dilution it has received, the wool presents appearances to unassisted vision, of a remarkable character—it has become intensely black.

Wool boiled in diluted caustic soda is subject to the same contingency as human hair under the like circumstances; it firstly turns black, then bursts throughout its entire length, and finally dissolves, leaving only the imbricated scales, which covered the external surface.

A specimen of the Leicestershire wool thus treated produced results shown in figure 2, which represents the scales of imbrication alone: some of the scales will be seen to possess central nuclei, which have entirely disappeared from the remainder. To show how well these scales have maintained their integrity, epidermic scales from a Spanish sheep (Mr. Peckham's) are shown in figure 3;

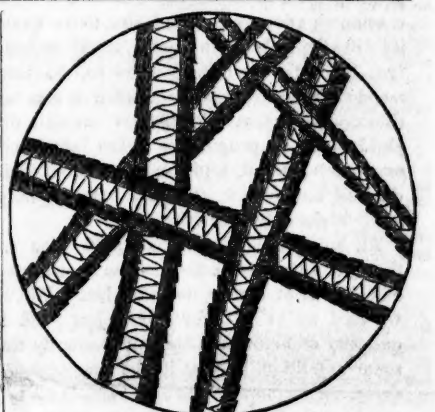


Fig. 1. Hair of an infant magnified.

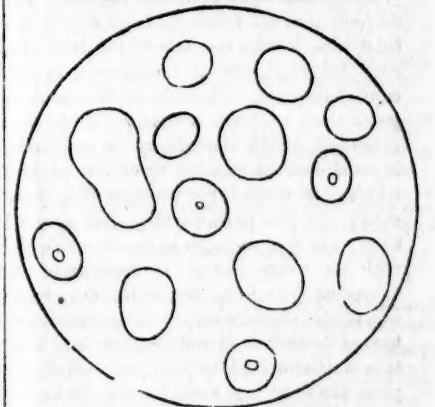


Fig. 2. The scales of a fibre of Leicester wool.

here it will be seen that all the scales are uniformly nucleated, which fact agrees with the structure of these scales in man and other animals. If wool be simply macerated in diluted caustic soda the same effects result, as

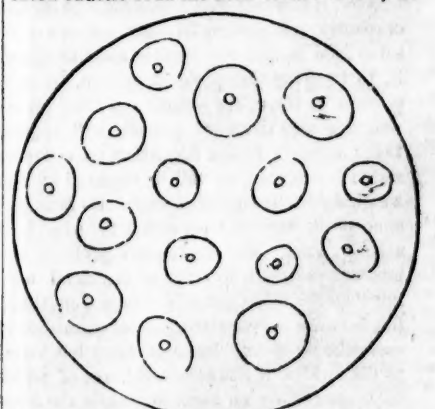


Fig. 3. The scales of a fibre of Spanish Merino wool.

with human hair, it swells considerably, and the epidermic scales participate in the enlargement.

Mr. Ryan, the Weather Prophet, has written to the *Faw Paw True Northern* in relation to the winter, and this is what he says: "It is impossible for me to make any mistake concerning the laws which govern the weather. They are sublime enough for the most learned, yet I could impart them to any school boy with ordinary intellect. Note the following words: South-west and north-east are the contending points of the wind from the first of the present month, to the first of March next. South-west will prevail. The storms will be thirty-five in number, let them be rain or snow, during the same time. The weight of our storms will be north-east.—When the storm is over the wind will shift to the prevailing point—south-west. There are mild points for the winter. Permanent sleighing need not be expected. Sixth and thirtieth of January is the index for that month. I will give timely notice of the day the change will take place in February for that month. That month will end the winter."

Who will keep note of these positions, and send us the results of their observations? According to the above we shall have a mild winter. Shall we have an early spring, is the next question?

Large Cattle vs. Small Cattle.

There seems to be a very prevalent disposition, in this as in almost every other country, to strive, by every conceivable means, to increase the size of all of our domestic animals. Many, if not most people, seem to suppose, that when they have produced or procured a monster animal in size, they have reached the very acme of perfection. The hugeness of the frame, apparently compensates, in their eyes, for numberless faults or defects, in quality, form, and proportion. If they are large—"large and noble"—they must be right; but, if they are smaller than it is possible to grow them, it matters little how perfect in formation, how well proportioned, or how many excellencies may be combined in one animal, they are pronounced small—"too small," and this is esteemed sufficient for their condemnation.

It is, perhaps, of little consequence how this state of feeling originated, or why it exists. It is either right, or it is not. And believing, for one, that it is wrong, from the beginning to the ending, I will attempt a defense of the smaller animals, in opposition to the claims of the larger ones; not only of the smaller breeds, as opposed to the larger breeds; but also, of the smaller animals of each breed respectively, in opposition to the larger animals of the same breed: not because they are small, but, because of believing, that they are more profitable to the producer. And, in order to decide upon the question of their profitability, I propose to measure them by an infallible scale, which, when properly constructed, will, if resolved into words, read as follows: viz. those animals are the most profitable, which will yield the greatest quantity of the product sought, in proportion to the amount necessarily expended upon them, in labor, care, and food consumed; regard being had, also, to the quality of that product; this being, in my estimation, the only true rule by which to test their respective profitability. And if it can be demonstrated, that the smaller animals do yield more, in proportion to the labor and expense bestowed, and food consumed, than do the larger ones, then the smaller, may justly claim the superiority.

All animals consume some proportion of their food, for which they make no return; and this is, of course, an entire loss. For, if we feed an animal, for a year, just such a quantity of food as to keep it in exactly the same condition, so that it shall neither fall away, nor increase in size or weight, but shall at the end of that time, measure and weigh precisely the same as at the beginning, it is evident, that all which we have fed it, is a total loss, besides the loss of the labor and care bestowed, and of the interest on the capital invested. There is, in all animal organizations, a certain proportion of the food consumed, which is necessary to, and which is used for, the keeping up of the physical system. If animals get less food than is necessary for this purpose, they fall away; if they consume more, it is either discharged with the refuse matter, or assimilated and converted into flesh, fat, milk, &c., which constitutes the increase, or compensation returned for their food and keeping: and hence that animal is best, or pays best, which will yield the most, not alone for the food out of which the increase is actually manufactured but which yields the most from all the food used, including both that from which the increase comes, and also that which is lost, or used merely to keep up the physical organism.

Now, it is a fact well established both theoretically and practically, that animals consume food to maintain them in condition, that is, to keep up the physical system, in proportion to their live weight; so that, an ox weighing two thousand pounds, will require twice as much fodder for which no compensation is returned, as will be required by one weighing one thousand pounds. So far, there is no profit derived from either for the food actually used. But the relative profit is one hundred per cent. in favor of the small one; not because it has actually returned anything, but because appropriating equal quantities to each, the small one has a quantity left equal to that which it has consumed, out of which to manufacture an increase; while the large one has nothing left from its equal proportion out of which it can acquire an increase. Beyond this point, the relative profit will depend upon which shall return the most for the food consumed, over and above the constant quantity necessary to maintain them in condition. And here we shall also find the smaller still maintaining its superiority.

The smaller animals will, generally, be found more perfect in their anatomical organization, more vigorous and hardy, more symmetrical in form, more compact, more healthy, possessed of greater fineness of bone and freedom from oil, than large ones; while the latter will, generally, almost invariably, be found to have less capacity to assimilate their food, and to require longer and more luxuriant feeding; and, even then, will not

so amply fatten; nor will the product returned, be of equal excellence in quality with that from the smaller animal. The largest animals are of an unnatural growth; they have stepped beyond the natural limits of the species; and, being of a preternatural size and growth, they are extremely prone to deformity either in carcass, bones, or head. In fact, just as they approach monstrosity in size and development, nature begins to disown them for their departure from her most salutary laws. Their constitutions become too artificial to endure hardship, or even ordinary changes; rendering them subject to scrofula, pleurisy, pneumonia, consumption, and other pulmonary diseases, and fevers; and worst of all, these diseases become, at once, hereditary, difficult of control, and hopeless of eradication: neither is the evenness and uniformity of quality in their offspring so great, as with smaller animals.

Many experiments have been made to determine the relative profit of fattening large and small animals; among which, we may cite those of Van Schottfield and Reviere, in the south of France, who made many carefully conducted experiments in separately feeding large and small cattle, for the purpose of determining which were the most profitable fatteners; and always found the small to pay better than the large ones: so much so, that they estimate the same quantity of food fed to small cattle, returned from one-third to three-fifths more profit than when fed to the larger cattle. Reviere, more fully to test the result upon an indiscriminate lot of cattle, not selected by himself, made a contract with a butcher, to feed all the cattle which he should, from time to time buy, for two and a half months; the cattle to be weighed when received, and again when taken away, and the feeding, paid for in proportion to the gain in weight; and, in this case, he found that of the large cattle at least one-third, did not gain enough to pay for their fodder, while of the small cattle there was scarcely a thirtieth part, but what paid a profit: and, yet, they were all of the same breed; the common or native one, of that part of the country.

With regard to the milk giving qualities I do not suppose that any one will claim superiority for the large cattle, either in quantity or richness, when regarding, alone, the quantity of the food consumed, which was to be the scale by which to test their profitability; but, were it to be claimed, I think there are facts, many and strong, enough to give the palm to the small ones.

Therefore, in considering all these matters, no one can be surprised, at finding that all the genuine improvers of the breeds of our domestic animals, whether of cattle, sheep, or hogs, have labored to reduce the size. Bakewell, in his improvement of the Leicester sheep, materially lessened the size. He perceived that smaller or medium sized animals increased in weight much more rapidly than very large ones, that they consumed much less food, and that the same quantity of fodder applied to feeding a larger number of small sheep, would produce more meat, than the same quantity, applied to feeding a smaller number of large sheep; hence, the sheep selected by him, from which to breed, were those possessed of the most perfect symmetry and the greatest aptitude to fatten, which he could obtain, and considerably smaller than the sheep then generally bred. So too, in the improvement of hogs, the breeds for profit, are invariably, the smaller ones, or an improvement upon the larger, made by reducing the size, and at the same time, securing greater perfection in form. These are, incontestably, the breeds for profit, especially under our present rule—that of returning the most, in quantity and quality, in proportion to the amount of food consumed—and, in the improvement of the Shorthorn cattle, we find, also, that Sir Charles Colling, who made greater advances upon the old breed than any other man, and who has not been surpassed even to the present time, after once decreasing the size by the use of Hubback, an animal considerably smaller than most of the old breed, considered it expedient to reduce still further, their size; and selected the Gallo-way as the cross best calculated to improve them, by decreasing the size, shortening the leg, and giving more fineness and compactness to the carcass: and the great success attending his breeding, after this, sufficiently demonstrated that he was right, and that he, who now attempts to improve them, back again, to a larger sized, longer legged, looser built race, will surely breed all the profitable qualities out of them, as the result of their ideas of "big breeding."

But, let it not be supposed, that I favor the smaller animals merely because small. It is the small and well formed, in opposition to the large and ill shaped animal, of which I approve. Symmetrical in formation, justness of proportion, and constitutional healthiness and hardiness, firstly, and size, secondly, to be considered, would be my version of the true rule: but then, when the secondly came to be considered, I am strongly of the impression, that I should not try to astonish na-

ture with the hugeness of the size, either of the breed, or of the individual of whatever breed, chosen.

A South Down Sheep.

On the 10th day of November I slaughtered a South Down Ewe, purchased last year of William Whitfield, of the town Waterford, in the county of Oakland, and the following is the product:

85 lbs choice rendered tallow at 1s,	\$4.28
60 lbs mutton, of superior quality at 5c.,	3.00
1 pelt,	1.00

Total,

The sheep was only grass fed, having ranged during the past season on ordinary pasturing with other sheep, and there is no doubt but by a moderate amount of stall feeding the value might have been increased to ten dollars or upwards. The weight of the quarters, before removing the tallow, was 82½ pounds. Mr. Whitfield from whom I purchased the sheep, informs me that in the spring of 1857, he fattened 20 of his flock of South Downs, the carcasses of which, when dressed, averaged 100 lbs. each.

As a meat producing animal, there is no sheep that rank with the South Down; and now that the period has arrived when butchers' meats will bear transportation by the Rail Road, to the markets of the Atlantic cities, it is becoming an object among farmers of our State to produce cattle and sheep for those markets, the more especially so, since from present indications the advent of the weevil into our State is likely to render wheat-growing a precarious business hereafter.—E. Goodrich, in *Genesee Democrat*.

Wintering Shoats.

MR. EDITOR:—As the pork trade is attracting some attention in our Peninsular State, and as it is important to study economy in raising hogs for the market, I will give a few suggestions to the readers of your most excellent periodical, in regard to the wintering of shoats.

The expense of feeding hogs during the winter season, prevents farmers from raising and fattening many hogs. During the winters of 1854 and '55 I had to winter 28 July pigs. I kept them in a small field of one and a half acres, fed them one ear of dent corn each per day, and gave them water from the well to drink. Those pigs grew remarkably well during the winter and looked as clean and thrifty as any shoats I ever saw.—Being confined to one field, they are more quiet than when allowed to roam over the farm and all over the neighborhood, and being worried by every good dog in the street. And then they are deprived from rooting over the barn-yard and large piles of stable manure, which requires some labor, and which I consider injurious to porkers. The next important item in care is, to see well to their sleeping places, which should always be upon the ground instead of upon a floor. The building should be roomy, and at least four feet high, with a door opening to the east or south, and a small ventilator in the roof.—If hogs can be kept warm without sweating, it is much better; clean dry straw should be added to the nest at least twice a week.

I am wintering sixteen June pigs, and they get only one ear of corn per day, and cold water to drink, and they are doing well.

Yours, &c.,

J. V. DUPUY.

P. S. By the way, the farmers in this vicinity are much pleased with the change of your paper from a monthly to a weekly, and manifest their pleasure by subscribing readily for the same. I have already 26 subscribers upon my list, and expect many more.

J. V. D.

Tecumseh, Dec. 21st, 1853.

Sorghum Growing.

The Sorghum cultivators of Winnebago county, Illinois, held a convention at Rockford on the 8th of December. There were shown a large number of specimens of syrup, but no sugar. Amongst the specimens of syrup, however, there was one which was stated to be the drainings of granulated sugar. This was presented by Joseph Milner, of Rockford, who made the following statement:

Joseph Milner stated that he raised two lots of cane; one-half acre on river bottom land, one-fourth acre on light, sandy soil.—The cane on the latter was smaller, yet of equal length with the other. This was fully ripe about the middle of September, and was crushed the 26th of the same month, yielding 1 gallon of syrup to 4 gallons of juice.—The cane on bottom lands yielded 1 gallon of syrup to 10 gallons of juice—the syrup being of equal quality. From this syrup sugar was made by taking 8 gallons of juice and boiling it down to 1 gallon. This being set aside in crockery vessels, at the expiration of three weeks was drained, and produced 2½ pounds of fair, well-grained sugar to each gallon of syrup. The juice was clarified with milk and eggs.

He who is always inquiring, "what will people say?" will never give them an opportunity to say any great things of him.

He who studies books, gets the frame of knowledge; but he who studies men, gets the soul.

Injuries are seldom forgotten—benefits seldom remembered.

Profitable Wheat Growing.

The following is a statement of Mr. Simeon Davidson, of Tecumseh, sent in by him to the State Agricultural Society, as the mode of cultivating the wheat to which was awarded the first premium at the State Fair of 1858. Can any of our farmers give us like statements on their crops, or can they equal or exceed this one. Shall we hear from them:

The soil of the field on which the crop of wheat was grown, was a gravelly loam, and bore a crop of clover the year before. The cultivation previous to that was somewhat peculiar. The farm was said to be much run down when it came into my possession in 1854, and was reported as not fit to grow any thing. In the spring of 1854 I plowed the field for corn, first spreading over it a large stack of old straw which had accumulated. The former proprietor had always been in the habit of burning his straw to get rid of it. The straw was plowed under very deep, for the corn. After the corn got in the ear, the white grub ate the roots so that it was destroyed, and a strong wind coming on blew it down. My calculation was to have sown wheat amongst the corn, but the destruction of the crop changed my plans. After the corn-stalks were removed from the field, I cultivated the field with a large, two-horse cultivator, and sowed it with wheat. In the summer of 1855 it proved a good crop, and although it was the wet season, when there was so much grown wheat, I saved the crop in a sound condition. The clover appearing to come up strong, although no seed had been sown, I let it stand, and the next spring top-dressed it with a peck of plaster and a bushel of ashes to the acre, and mowed twenty tons of good hay from the nine acres, and from the second crop thirty bushels of clover seed, which sold at \$6 per bushel. In the spring of 1857 I again took off nine tons of hay, and in the month of August plowed under a good sward, with a large plow that buried the sod ten inches. This sod was rolled with a heavy roller, then dragged twice, and afterwards cultivated. The harrow was then put on the third time to smooth the surface, and the seed drilled in with a two-horse drilling machine. The variety of wheat which I sowed was the white Blue Stem, at the rate of a bushel and a peck to the acre. In March 1858 I top-dressed the wheat with a bushel of ashes and a peck of plaster to the acre. The crop was harvested between the 7th and 11th of July, and yielded at the rate of thirty-five bushels per acre, which was sold at the rate of \$1.03 cents per bushel, at a time when the price was low. The crop suffered somewhat from the rust, but not a great deal, and weighed at the rate of 60½ pounds to the bushel. The cost of the crop is estimated as follows:

9 acres plowed first time in Aug. '57, at \$2,	\$18.00
do rolled at a cost of.....	2.00
do dragged twice, at a cost of.....	4.00
do cultivated, at a cost of.....	2.50
do dragged the third time.....	2.00
do drilling in the seed.....	4.00
Cost of seed, at \$1 per bushel, 1½ bushels.....	1.25
Top dressing in the spring of 1858.....	1.50
Harvesting, at the rate of 12s per acre.....	15.50
Thrashing and marketing.....	22.00
	\$81.75
Use of land, at \$2.80 per acre, its actual cost, \$25.20	\$106.95

Of the field there were three acres very heavy that were much lodged, the remainder contains the five acres entered for the premium. The yield of the whole field was 303 bushels, which sold at \$1.03 comes to.....\$314.15
Value of straw, estimated at..... 25.00

Clear returns from the field.....\$232.10

The above statement is correct and true, and is made in accordance with the rules of the State Agricultural Society, according to my best knowledge and belief.

SIMEON DAVIDSON.

How the Potato Disease Spreads.—We have a great many theories promulgated concerning the potato disease, and quite a furor has been directed against the insect tribes. The following experience indicates as certainly as any observation the source of "the rot." "Some healthy plants of the Chrysanthemum tube were placed under vines infected with the *oidium* or grape mildew, a well-known fungus. In a short time the chrysanthemum was covered with this fungus. This experience suggested some trials with the potato, and some plants which had sprung up accidentally and were growing wild but healthy, were potted and placed with the chrysanthemum and the vines. The potatoes grew without being affected in any way, the *oidium* not spreading to them, or seeming to have any effect upon them; But when the leaves of a potato plant affected with the *botrytis*, a parasite that causes the rot, were shaken over some of the healthy potatoes, the plants sickened and died in a few days." This experiment is taken from the journal of the London Horticultural Society.

The Country Gentleman notices a cow owned by E. M. Winegar of Mount Morris, N. Y., that yielded for fourteen days 898 pounds of milk, and in five weeks gave a total of 76 pounds of butter. This is not quite up to the Gorham cow at Marshall, in this State.

MICHIGAN STOCK REGISTER.

SHORTHORNS.

Numbers with an "e" following them refer to the English Herdbook—all others refer to the American Herdbook, unless otherwise noted.

No. 74.—STAR. Red and white cow. Calved June 10th, 1857. Bred by J. S. Goe of Brownsville, Fayette Co. Pa., and sold by him to D. M. Fox, of Lyons, Mich.
1. Dam, Althea, by Lord Barrington, 659, a bull by Fortune 11487e, out of Lady Barrington 4th, by Meteor 104, who was sired by Duke of Wellington 55, imported by Geo. Vail of Troy N. Y. Lady Barrington 4th was out of imported Lady Barrington 3d. See A. H. B. p. 422, 2d vol.
2. dam, Pocahontas 2d, by Belvidere 244, by Meteor 104, out of Empress imported.
3. dam, Pocahontas, imported in 1839, by Red Jacket, (Col. Powell's.)
4. dam, Roana by imported Major, grandson of Denton 198e.
5. dam, Roana imported from herd of Mr. Whittaker the celebrated English breeder.
Sire, Richard Booth 906, bred by R. Booth of North Allerton Yorkshire, Eng., out of imported Rowena by Monk 11824e.

No. 75.—ADELIA. Red roan cow. Calved July 27, 1856. Bred by J. S. Goe, Brownsville, Pa. Sold by him to H. E. Degarmo of Lyons, Mich.
1. Dam, Sarah, by Lord Barrington 659.
2. dam, Beauty Spot 4th, by Belvidere 244, bred by Geo. Vail of Troy, N. Y.
3. dam, Beauty Spot 1st, by Duke of Wellington son of imported Prince of Wales 574, (4830e.)
4. dam, Charlotte, by imported Wye Comet 1591e.
Sire, Waterloo, sired by Earl of Seabam 462, (10181e) imported by Ambrose Stevens and J. Sherwood in 1850.

[This is imperfect, Waterloo not being a herd book animal; Geo. Goe should have stated the pedigree of his dam back to an imported cow.—Ed.]

No. 76.—VENUS. Red cow. Calved in 1853. Bred by J. S. Goe of Brownsville Fayette Co., Pa. Sold by him to D. M. Fox of Lyons, Mich.
1. Dam, Flora 2d, by Jackson, by Sultan 163.
2. Delight, by Chilton, a son of Sultan 168.
3. Nymph, by Duke of Norfolk 1939e.
Sire, Matchem 8d, by Charles, by Sultan 193.
[In this pedigree also the dam of the sire should be traced.—Ed.]

No. 77.—VICTORIA. Red cow. Calved April 29, 1853. Bred by J. S. Goe of Brownsville, Pa. Sold by him to D. M. Fox of Lyons, Mich.
1. Dam, Flora by Jackson, by Sultan 163.
2. Delight, by Chilton, a son of Sultan 168.
3. Nymph, by Duke of Norfolk 1939e.
Sire, Matchem 8d, by Charles, by Sultan 193.

No. 78.—ALTHEA. Red and white cow. Calved Jan. 23, 1854. Bred by J. P. Remington of Philadelphia. Sold by J. S. Goe to D. M. Fox of Lyons, Mich.

1. Dam, Pocahontas 2d, by Belvidere 244.
2. Pocahontas, by Col. Powell's Red Jacket, a bull of the Whittaker stock.
3. Roana 2d, by Major, imported in 1839, from England in the Whittaker stock.
4. Roana, imported with the same stock.
Sire, Lord Barrington 659. A bull of excellent stock, sired by Fortune 11487e.
1. dam, Lady Barrington 4th, by Meteor 104.
2. Lady Barrington 3d by Cleveland Lad 3497e.
3. Lady Barrington 2d, by Belvidere 1706e.
4. Lady Barrington, by a son of Mr. Mason's Herdman 304e.
5. Young Althea, by Wonderful 700e.
6. Old Althea by Alfred, 29e.
7. — by Young Favorite 6994e.

No. 79.—RED ROSE. Red cow. Calved 1853. Sold by J. S. Goe of Brownsville, Pa. to D. M. Fox of Lyons, Mich.
1. Dam, Red Beauty, by Belvidere 244.
2. Sophia 2d, by A. Boleman's Yorkshires.
3. Sophia, by imported Yorkshiresman 159. This bull was bred by Thomas Bates of Kirkclevington, and imported by Joseph Cope of Westchester, Pa.
Sire, Second Lord Barrington 955, by imported Billy Pitt, 9967e, out of Lady Barrington 12, by 4th Duke of Oxford 10167e.

[This would be a first rate pedigree if 3 Sophia were traced back to her imported progenitors.—Ed.]

No. 80.—BLOSSOM. Cow, mottled roan. Calved Jan. 2, 1855. Bred by Mr. Duehet, and sold by J. S. Goe of Brownsville, Pa. to D. M. Fox of Lyons, Mich.
1. Dam, Grace Darling, by Washington, a son of Mr. Rotch's imported bull bred by Mr. Whittaker, by Colossus; dam Lady Mary by Mercury. [There is no imported bull of Mr. Rotch's on record, bred by Mr. Whittaker from Colossus. John Hare Powell of Philadelphia, purchased from Mr. Rotch a bull named Bertram II No. 21 of A. H. B.]
2. Old Rose, bred by Mr. Dennis Kelly of Philadelphia, [we think by imported Prince of Wales?]
3. Patience, by imported Prince of Wales 574.
4. Western Lady, imported, by Wye Comet 1591e.
5. White Rose, imported, by Warrior 672e.
6. — by Charles 127 e.
7. — by Prince 521e.
8. — by Neswick 453e.

* The dam of Washington was an imported cow, the property of C. I. Ingersoll.

Sire, Capt Bragg a thoroughbred bull belonging to Mr. Duehet. [Who is Mr. Duehet? and of what stock is Capt Bragg? This bare statement may be satisfactory to Mr. Goe, but in laying the foundation of a herd in our State, we want a statement that will show the descent from the imported Stock.—Ed.]

No. 81.—TULIP. Cow, white with a few roan marks. Calved Nov. 1, 1857. Bred by J. S. Goe of Brownsville, Pa., and sold by him to D. M. Fox, Lyons Mich.
1. Dam, Lady Margaret, by Valentine 1st 2826.
2. Delight, by imported Prince of Wales 4890e.
3. — a cow imported by Dennis Kelly, Esq. Philadelphia.
Sire, Liberator, 639½ an imported bull from the celebrated herd of J. Tanqueray, Esq., owned by Charles Kelly of Delaware Co., Pa., of remarkably favorite English blood.

DEVONS.

No. 32.—YOUNG DUKE OF DEVON. Calved March 20, 1856. Bred by John Allen, Coldwater, Mich.; owned by John Richard, Easlin, Mich.
Dam, Duchess, by Duke 2d, out of imported Duchess.
2. dam, Jesse Williams, by Red Rover.
3. dam, — by Prince Albert, imported from the herd of Mr. James Davy of North Moulton, Devonshire, England.
Sire, Duke of Devon, an imported bull, brought into this State by F. V. Smith, Esq., of Coldwater, Mich.

The celebrated Mr. Bakewell, once said that the road for a farmer to get rich was to breed the best kind of cattle, sheep and horses, and the road to grow poor was to breed the worst of their kind, as the best consume no more the worst.—Goo farming was getting a dinner for your appetite whilst poor farming merely gains an appetite for the dinner.

The Garden & Orchard.

Horticultural Perambulations among the Gothamites.

After the final adjournment of the American Pomological Society, (of whose doings some account is given in previous numbers of the FARMER,) the writer devoted a few hours to looking about among the horticultural celebrities of the metropolis, and its vicinity. Taking passage on a steamer, at the foot of Fulton street, he fell in with other members of the late convention; and we soon found ourselves en route for Flushing—the land of gardens and nurseries, which we reached, after a pleasant trip by steamer and railroad, and found Mr. Parsons, of the firm of Parsons & Co., in waiting, with a carriage, to convey us to his establishment, where we arrived after a pleasant drive through the village, which is built partially, if not principally, upon the original estate of this family. (The Co. in this case seems to be a family one.) The price of farms here is rather startling to a person used to the broad acres, and low prices of the "Great West." The proprietors informed us that they had recently purchased sixty acres of ordinary land, adjoining their establishment, with no improvement of any value, for which they paid at the rate of \$3,000 per acre; and that in small lots for gentlemen's residences, it would have commanded a much higher figure.

The practice of these gentlemen is, to lay out their lands in commodious lots, with broad streets, which they invariably plant with shade trees, while the grounds are kept in the highest state of cultivation. This of course attracts the better class of buyers; while at the same time, the proprietors exercise a careful discrimination in favor of such as they esteem the most desirable settlers. In passing through the streets, the happy working of this policy is strikingly displayed in the unusual amount of taste manifested in fitting up the yards and residences.

On our arrival we fell in with several others who had preceded us—making, in all, a very respectable gathering. Among them we recollect Mr. Bateham, of Ohio, and Messrs. Westbrook, and Steele, of North Carolina. After looking about the grounds a short time, the party proceeded to the residence to refresh the "inner man." This is the residence of which a fine engraving was given in the "Horticulturist" for January, 1857, and is a very elegant and commodious establishment. It stands upon grounds recently reclaimed from the forest; and the lawn is dotted with trees, many of which are the natural growth of the forest. Among these, the writer observed a fine specimen of the *Liriodendron Tulipifera*, (our native Whitewood), which looked as natural as if grown in the wilds of Michigan.

This establishment seems to be mainly devoted to the propagation of the ornamentals. We saw large plats devoted to deciduous and evergreen trees, many of which were already from eight to ten feet in height, having been several times transplanted, in order to increase the amount of fibrous roots, and to induce the formation of close, compact heads. Such trees are much in demand, at remunerative prices, for planting about city and suburban residences, to gratify the impatience that men of means often indulge, to give to their newly built residences an air of age and maturity. They are usually removed by the purchaser at his own risk, and often at a heavy expense.

The plants in course of propagation embrace many novelties; and evince a determination to keep up with the times. We saw a large plat of the Linneus Rhubarb, planted along side of the Victoria. It is a stronger grower than even that giant variety, and claims, also, to be its superior in quality. It is rapidly working its way into general favor. Although this establishment seems to make the ornamental department a speciality, they by no means confine themselves to it, as we examined several plats of Pear, Plum, and Cherry trees, in fine order, and embracing quite an extensive collection of varieties; many of them fruiting in the nursery rows. My attention was especially attracted by a hedge of Siberian Arbor Vitæ, seven or eight years planted, which formed a perfect screen, eight or ten feet in height. This is an improvement upon our American variety, from its more compact habit, requiring no shearing to keep it in shape, and supposed to be equally hardy. In the foreign graperies we saw a fine collection of varieties, loaded with delicious clusters. Among them we noticed the curious Syrian grape, with clusters eighteen inches in length, supposed to be the variety that the Israelitish spies carried back to their brethren, on their return from Jerico. Another curiosity, was a very small, purple, or black grape, entirely destitute of seeds, the name of which is forgotten.

Before leaving the establishment, we were shown into the residence of the original patriarch of the family; said to have been

built soon after the settlement of the country; now occupied by a descendant of the original owner. Its appearance, and the grand old shade trees surrounding it, give ample assurance of its antiquity; and it seems to have been the pride of the family, as far as possible, to preserve the style, finish, and even the furniture, of former times, only such slight changes having been made as had become indispensable to the comfort of the inmates. Indeed, this whole extensive domain is one of those rare cases, in this country, in which family attachments have sufficed to secure the uninterrupted transmission of the original homestead, in the same family line.

After spending three or four hours very pleasantly and profitably, we took seats in the cars, and in another short hour, and at the expense of a "Quarter," found ourselves again amid the hurry and bustle of Broadway.

We had intended to visit, also, the establishment of Wm. R. Prince, while at Flushing, but time would not suffice, without being detained another day, and we were reluctantly compelled to forego the contemplated visit. We however had a view of a portion of his grounds from the Railroad Depot, to which they are adjacent. Mr. Prince has been mainly influential in the introduction of the *Dioscorea Batatas*, and claims to deserve the gratitude of his country for his efforts. Whether this be the case or not, seems yet to be doubtful, as its adaptability to our wants is yet by no means established. It is however "guessed" that he has made no very great pecuniary sacrifice in the matter, if we may judge by the prices at which tubers have been sold.

Wending my way up Broadway, I finally reached the Crystal Palace, where the fair of the American Institute was to open in a few days. As preparations were constantly going forward, the building was not open to visitors. I was however so fortunate as to make the acquaintance of an exhibitor on my way up, who introduced me, and I was permitted to spend several hours, very profitably, in looking about among the curiosities of the place. Many things were already in place, and large quantities of machinery, goods, &c., in process of being put up. Although not strictly horticultural, I cannot forbear speaking of one article that especially attracted my attention. That was a small working steam engine entirely of glass of various colors, except the cylinder, and boiler, which were of mica.

The collection of agricultural and horticultural implements was already very large. The fruits exhibited by the American Pomological Society were already brought here and arranged, and there was also a fine display of market vegetables even then upon the tables. After spending a half day in merely glancing at a few of the novelties on exhibition, I departed, with no idea that that "fairy dome," with so many wonders of art, genius, and nature, must, in two or three short weeks, fall a prey to the devouring element.

After making arrangements to return home, finding a few hours to spare, I took a "bus" for Union Square; where the city authorities are providing a "breathing place," that the millions who congregate there may find air and exercise, aside from their crowded thoroughfares. But of this hereafter.

Plymouth, Jan. 3d, 1859.

Culinary Vegetables.

BY PROF. J. C. HOLMES, LANSING.

Having for many years been a cultivator of culinary vegetables, as well as other horticultural products, I made up my mind, long ago, to cultivate none but the best, provided I could procure the seeds, and once having them, keeping them pure if possible, and that others might have as good vegetables as myself, distribute the seeds as opportunity offered.

I noticed in the FARMER for December, a criticism upon the report of the Fruit Committees at the Fair of the State Agricultural Society, and I can sympathize with the writer of that article, but, at the same time I know somewhat of the difficulty of procuring men of the right stamp to serve upon committees at the State Fair. I also know that it is a very difficult thing for the best of judges, even, to correct the gross errors in the nomenclature of the fruit on exhibition at either the State or County Fairs. To do this effectually, we want a Horticultural Society, and some place to hold its exhibitions; then Nurserymen and amateur Horticulturists can take hold with a will, and carry it forward understandingly, and energetically.

When reading the criticism upon fruits, it occurred to me that while at the last State Fair, I saw on exhibition two large, smooth skin squashes, marked "Boston Marrow." They were beautiful looking squashes, but it was my opinion that they were not Boston Marrow, but a hybrid of the Marrow, and something else. Those two squashes were awarded the first prize as the best Boston Marrow, but there were specimens there that were pure, and should have been awarded the premium.

The Boston, or Autumnal Marrow Squash, as it is sometimes called, was first introduced to notice by J. M. Ives, of Salem, Mass. Soon after its introduction, I procured some seeds from Salem, and have cultivated it ever since, and think it the best squash for culinary purposes of any variety with which I am acquainted, except one, and that one is the Hubbard squash, which was introduced to notice by Mr. Gregory, of Marblehead, Massachusetts.

In the report of the Massachusetts Horticultural Society for 1857, I find a very favorable notice of it. It says "the Hubbard squash, exhibited by James J. H. Gregory, of Marblehead, as a new variety, did not attract much attention, although the good qualities claimed for it led to an early trial of its merits. The size and form is about that of the original Marrow Squash; its color is a dark dull green; its shell is very hard; the flesh is of a deep orange color, fine grained, and of a very sweet and fine flavor; it keeps well for a long time. We have tested it on our table since the exhibition, and can cordially recommend it as a most excellent variety, and worthy of extensive cultivation."

Accompanying the report is a letter from Mr. Gregory, giving a history of the squash. Last spring I procured some seeds of this variety from Massachusetts, raised some of the squashes, and now have had an opportunity of testing it upon my own table. I think it is the driest, sweetest, finest flavored squash I ever tasted, and would recommend it to the notice of Michigan gardeners.

There is a very light colored, scollop, bush squash, that is very early, sweet, dry, and very prolific; this, with the Boston Marrow and Hubbard, will supply the table in succession for several months. The winter crook neck is an old standard and can be added to the above list if thought desirable, but in some localities it is getting out of fashion.

HORTICULTURAL NOTES.

Hyacinths.

The best English gardeners, for the purpose of having the Hyacinth develop to its full perfection its floral beauties at or about the present season, use very rich compost, and a practice which it would be well to have more generally known. For instance, the soil used to pot them in is made by taking one-half the best yellow loam that can be procured, and the richest old cow-dung in a perfectly dry state, pulverized, and mixing the two together until they are thoroughly incorporated with each other. This makes a rich compost. The next process is to supply the pots in which they are planted with water, and not to let even the outside of the pot in which the Hyacinth is kept ever get dry, night or day. This is done by double potting—that is, by setting the pot in which the bulb grows, in a pot enough larger to permit a small quantity of earth to be put between the outside of the one pot and the inside of the other, being sure to have the inside rest on earth and not on the bottom of the large pot. By watering this regularly, it allows the plant to get a supply of moisture with good regularity and the outside of the pot never gets dry, the fine and delicate spongioles of the ends of the roots receive no check in the pursuit of food and drink.

Phloxes.

Those who have fine Phloxes should see that the crowns of the stools are not now exposed to the changes of the weather. Good, rich old manure should be thrown over the plants, to the depth of three or four inches; and this manure should be dug early in the spring, soon after the plants begin to show signs of growing. The Phlox is a strong grower, and is one of the chief ornaments of the flower-garden the whole season; they are now grown of various colors, white, pink, crimson, lilac, purple, rose, pale yellow, and striped, and spotted, and new varieties are constantly coming up. The English growers give the following properties as those which a good Phlox must possess to approach perfection:

1. Every bloom must be large round, flat, without notch at the end of the petal, and sufficiently numerous to form a good truss.
2. The truss should be large, widest at the base, and rising in the centre.
3. Petals should be of sufficient thickness to keep them from the last, neither turning upwards nor downwards at the edges.
4. The plant should be dwarf and branching, producing not less than three good trusses for exhibition.

Treatment of Orange Trees.

An orange tree planted in a box two feet square, and watered regularly, did not thrive. On examination, after two years standing, it was found that there was no drainage; the box was closed, and the earth surrounding the ball of roots had become compact, so that the root fibers had not penetrated it. The first treatment was to lift the tree carefully out of the box, and carefully to disentangle all the fine roots from the old soil, not disturbing the ball of earth which clung to it. The gardener then bored a few holes in the bottom of the box, and deposited in it a layer, six inches in depth, of brick-bats, broken in small pieces, mixed with oyster shells, and took the soil of an old cucumber bed, or a rich compost of old, well-exposed marsh muck and rotten manure, with a portion of fine sand, and placed this around the roots carefully, without breaking any of them. The stem and branches were painted over with a thin mixture of clay and sulphur reduced to the consistency of cream. The tree soon after began to grow vigorously and to push forth new shoots.

Twelve Good Hollyhocks.

The Hollyhock is not sufficiently known. It, like most other showy plants, has been taken in hand by the skillful gardeners of the old world, and crossed and hybridized until now it is as various as those of the rainbow, and it forms one of the finest plants for setting in clus-

ters, and singly as a striking, gay ornament to contrast with a dark foliage, to attract attention. The following are twelve of the favorite English roots:

Aurantia Superba, orange and scarlet, very distinct, fine, large and full, a bold flower.

Charles Baron, pinkish salmon, fine.

Comet, bright ruby red, very fine.

Cream of the Valley, cream color, fine form and large.

Duchess of Sutherland, bright rose, silvery tinge, beautiful.

Emperor, deep rose, large, bold flower, fine form and spike.

Lizzie, clear peach, very large, smooth and finely formed, magnificent flower, extra fine.

Jenny Lind, French white, fringed with pink, chocolate base, very large and full flower, centre well up, and a fine spike.

Meteor, brilliant crimson, fine spike and large flower.

Mrs. Dawson, satin white, with a lilac tinge, mottled.

Omar Pacha, pale straw, chocolate base, beautifully laced with purple, produces a splendid spike.

Yellow Model, primrose yellow, chocolate ground, splendid form, fine texture.

The Sikkim Rhododendrons.

These plants of which drawings and glowing accounts were sent to England by Hooker the celebrated botanist some years ago; have just begun to flower in England, and it is generally allowed that they surpass in beauty and magnificence all that was claimed for them. Most of them are hardy in the English climate, and many are sweet scented. The gardeners also are beginning to hybridize and cross them so that we may expect that new sorts, still more beautiful than those now known will appear in a short time. We hope to hear of the introduction of some of these new varieties in this vicinity, when we do we shall "make a note on't."

A New Peach.

The London Horticultural Society pronounces the new double crimson peach, *Amygdalus Persica*, perfectly hardy. This peach is one of the new plants sent by from China by Mr. Fortune, and has been on trial for some years in England.

Wash for Insects.

M. Letellier of St. Leu, France, has found that an excellent wash for destroying insects may be made in the following manner. Boil in 1½ pints of water 62 grains of American potash, the same weight each of flowers of sulphur and soap. Where greater strength is required, the potash and sulphur may be doubled the soap and water remaining the same. This solution is stated to do no harm to plants, while immersion for a second, kills ants, the largest caterpillars and cockchafer grubs.

New Hardy Fumaria.

A new hardy Fumaria, named *Corydalis Speciosa*, has been brought from the river Amoor by a Russian botanist, and has been introduced to the gardens of St. Petersburg. It is said to be as handsome as *Corydalis Nobilis*, the stem 1½ feet high, red in color. The flowers are a golden yellow in bunches at the end of the stem and branches.

A California Strawberry.

Named *Fragaria lucida* was lately introduced to the notice of European gardeners by M. Van Houtte of Ghent. M. Sphekelson, an experienced cultivator at Hamburg, reports favorably. He is of opinion that great things may be expected of it, and that it will give rise to a new race of double bearing varieties. Every runner and each branch of the runners form a strong flower bud. It ripens late, in the latitude of Hamburg towards the end of July, when other strawberries are over. It is better flavored than any late English sort. The fruit however is deficient in size, flesh and juice. The habit of the *Fragaria lucida* is very dwarf, the leaves have short velvety stalks of a red color; they are deep green and shining on the upper side, but woolly beneath. There is generally but one flower to a truss, and that is remarkably large. The fruit is sweet, without acid and a little vinous. The seeds are sunk in the flesh. Madame Elise Vilmorin, who has made this strawberry her speciality, is said to expect great things from it.

A fact about the Paulonia.

It has been found that flower branches of the Paulonia which may be cut in midwinter and hung up in any greenhouse, will flower in perfection, and in fact may be made to have the appearance of a dwarf flowering plant. The delicious scented, lilac colored, trumpet shaped blossoms, may thus be brought within reach. The discovery was made by M. Roussel, a gardener at Alfort. The Gardener's Chronicle thus explains this phenomenon: "The flower buds of the Paulonia are completely organized in the autumn. During winter they sit upon the branches closely wrapped up in their thick fur coats. When spring arrives they cast off their garments with their torpor, and burst into blossom. Even if remaining on the tree they have nothing to feed upon except the little sap stored in their immediate neighborhood. This sap is as present and active in the disengaged branches as in those that remain on the tree."

Notes from the Continent—Berlin.

I ought, before this, to have said a few words about the Botanic Garden here. It is situated on a low, marshy piece of ground at the village of New Schoeneberg, about a mile and a half from Berlin. It was made a royal kitchen garden about a century ago, but afterwards changed its character and about fifty years since it rose considerably under the able directorship of the celebrated Wildenow. It contains a considerable number of houses, most of them old, and built upon a bad principle. They are very much crowded; but would give ample accommodation to the plants, were it not for the improper system of growing so many examples—I must not say specimens—of each species. There is a vast collection of plants, most of them in a poor state of health, particularly the Orchids and Palms. There is no place

suited for the latter order. The ugly old barn of a place, built in 1828, in which the larger plants are now placed, being quite unfit for them, and a perfect contrast to the Palm House at Kew; but a considerable grant of money has been made for the erection of a new one, which is to be a curvi linear lean-to house. The tribe of plants best cultivated here, is the Ferns, which I shall reserve for my next letter.

There is also a very large collection of Begonias, Dr. Klotzsch, one of the Professors of Botany at the University, having lately paid particular attention to this order. He has completely confused the nomenclature of the genus, by cutting it up into more than fifty distinct genera. His distinctive characters are only to be discovered by careful dissection under a powerful microscope, so that they are not likely to come into use, particularly in England. What would the English gardeners think of such unpronounceable names as *Knesebeckia*, *Mitscherlichia*, *Seneidweilleria*, and the like, for their old favorites the Begonias? *B. picta*, under his new system, would become *Cladomischus argyrochomatus*,—far too long a name for general use, particularly now, when the days are so short; but it may well be prepared against the invasion this regiment of names may make upon our catalogue.

Range after range of houses are filled with greenhouse plants, with scarcely any arrangement, and still less cultivation. Indeed, it would be impossible to grow them, as they are so closely packed, that in many cases, one pot stands on the rim of another. One old, upright house, eighty feet by thirty feet, and thirty-six feet high, is filled with the hoary-looking Eucalyptuses, the graceful Casuarinas, and other large-growing plants. I wonder that the Casuarinas, with their elegantly-drooping Equisetum-like foliage, are not greater favorites in our English conservatories. Large specimens of them would have a fine effect in the Crystal Palace.

In crossing from this house to the next, I passed a pond well stocked with North American and other aquatic. Quite a little gem in its way was the *Nymphaea pygmaea*; its flowers are not much more than an inch in diameter, were produced very freely. They are white, with a slight blush in the centre; and there is no disproportion between them and the size of the foliage. Indeed, it is quite a fairy plant. In the low-roofed aquarium, the *Victoria* was thriving well; and I was lucky enough to see a fine plant of *Nymphaea gigantea* in bloom. Its sweetly-scented, bright-blue flowers, are freely produced. Three were open when I saw it, and many more buds were in an advanced state. I was told it had been flowering for three months. The leaves were two feet across, but I think might be grown much larger. Some *Nelumbiums* were decorated with their rose-colored flowers, as large as a Pæony, but much more delicate. Others bore their curiously-shaped fruit.

There is an arboretum in which such trees as are hardy here, are planted. The garden, also, contains a good collection of herbaceous plants; and the display of hardy bulbs was particularly fine in the spring.—KARL.

At the State Fair of the Connecticut Society, B. K. Bliss of Springfield exhibited one hundred and five varieties of the potato raised from tubers sent from the gardens of the Vilmorins of Paris, France; and Mr. E. C. Studley presented seventeen varieties more, raised from seed sent the previous year.

The skeletons of leaves may be obtained by soaking the leaves in diluted sulphuric acid, which eats away the body of the leaf, leaving only the fibres in the form of a delicate net work.

Poultry—Preparation for Spring.

It would be well now to make some preparation for the accommodation of poultry. many kinds will soon begin to lay, and early fresh eggs will certainly bring the highest price. A close observer says, "beginners in keeping poultry are prone to suppose that the nest of a setting-hen should be made as hot and dry as possible. This is wrong. A hen, if left to herself, seeks a cool, sheltered place, but on the ground, where it is rather damp or moist than dry. But damp in houses where poultry are housed ought to be guarded against." Where poultry are kept in the house, as at the present season, the floor should be of gravel, or some substitute, such as the rubbish from an old building, broken bricks, and old mortar. This floor should be spread with fresh straw ever morning. That can easily be raked off, and with it all the manure made by the fowls. This tends to keep them healthy by keeping them clean. A flat box that will hold a good quantity of ashes, into which has been thrown a handful of flowers of sulphur, should be provided for fowls, whether they are kept in the house or not. This will enable them to keep themselves free from lice. Cleanliness is the great necessity with fowls. They may be fed ever so well, but if not afforded facilities for keeping themselves clean, they will not thrive.

Regular and moderate feeding, is considered better than leaving them all the food they can eat, constantly within reach. "Give them only what they will run after, at regular times" is a maxim of the best poultry breeders, and to this we add, recollect that six fowls, well kept, will afford more satisfaction and better returns than two dozen shifting for themselves, without room and without care.

FOREIGN AGRICULTURE.

THE AGRICULTURE OF AUSTRIA.

TRANSLATED FROM THE FRENCH OF THE JOURNAL OF PRACTICAL AGRICULTURE.

Those who have carefully studied the agricultural history of Austria cannot fail to be struck with the wide difference existing between the present state of things and that which preceded the revolution of 1848. Before that period the breeding of Merinos, the manufacture of beet-root sugar, and the distilleries, were of all the branches of rural industry, those which alone were privileged to attract the attention of the large proprietors.

It was in the year 1761, under the glorious reign of the Empress Maria Theresa, that the first Merinos were imported into Austria, upon the Imperial domains of Mannersdorf and Hollisch. Thanks to the land owners of Silesia, Moravia, Bohemia, and Hungary, and above all to the indefatigable zeal and energetic activity of the Barons de Bartenstein and Ehrnfels, of Count Wrba, Prince Liehnowsky, the Counts Colloredo Mansfeldt, Hunyade, and Karoly, and of Messrs. Christian Andre and Bernard Petri, the rearing of Merinos was conducted upon the largest scale, and has since become both the chief product of Austrian agriculture and the brightest jewel in its crown.

The high price of wool, and the depressed condition of other products of the soil, have exercised a decided influence on the progress of wool-husbandry and the rearing of Merinos in Austria; but with the progress of civilization, coupled with a consumption continually increasing, and assisted besides by the extension of the means of communication, that branch of rural production cannot fail to increase still more in importance, and the enlightened cultivators ought to think seriously of replacing with fine-wooled animals the common races which are still met with in their flocks. This improvement is so much the more of pressing importance that the subdivision of the land in the rest of Europe tends to banish the breeding of sheep into those countries in which large domains still exist, as Hungary, Silesia, Moravia, &c.

The number of sheep in Austria at the present time amounts in round numbers to thirty millions, which yield annually 36,600,000 kilos. of wool (84,000,000 lbs.), representing a value approximating to 157,000,000 florins or \$53,500,000, which forms the subject of a commercial operation, the importance of which may still be increased to a very considerable extent.

Germany, as is well known, is the cradle of the manufacture of sugar from beet-root. It was a Prussian chemist, M. Margraaf, who first discovered, in 1747, the presence of crystallizable sugar in beet-root. He was followed by Achard, who established at Cunnern in Silesia the first beet-sugar manufactory; but it was not till the beginning of 1809 that the continental blockade (the Berlin and Milan decrees of Napoleon) gave an active stimulus to the new industry, which has required not less than thirty years to acclimatise itself in Austria.

The establishment of the first sugar manufactories in Austria, date from the year 1830, which saw erected those of Prince Oettingen-Wallerstein, at Klein-Kuchel, near Prague; of Baron de Stratendorf, at Bedeskau in Bohemia; of Prince Latour and Taxis at Dobrobit; of Count Czernin at Sudkal, near Malleschau in Bohemia; of Count Colloredo Mansfeldt at Stacy in Lower Austria, &c. In the ten years from 1830 to 1840, 113 factories were put in operation; but of this number the greater part of those of the least importance, namely those which were worked by a naked fire, and employed less than 1,500,000 kilos. of beet-root (1,674 tons), have been successively abandoned, and to such an extent that at the present time they do not reckon more than 108, which consume about 308,000,000 kilos. of beet-root (343,750 tons), and produce 14,000,000 kilos. (or 15,625 tons) of sugar, 9,240,000 kilos. of molasses (14,776 tons), and 30,800,000 kilos. of residue (34,375 tons). The total amount of the duties received by the Treasury is about 1,310,000 (or \$262,000) being about 75 cts. per 100 pounds of sugar.

The discovery of the ingenious process, by which we can revive the animal black (charcoal) and make it serve again in the manufacture, has enabled the manufacturers to employ a larger quantity, and thus to raise to 7 per cent. the return in sugar from the raw beet-root. This improvement has consequently increased the product of Austrian sugar to 15,500,000 kilos. (or 21,764 tons), which represents about one-third of the consumption of the empire.

The average return of the beet-root is 25,000 kilos. per hectare (or 12½ tons per acre.) 35,500 acres are devoted to this cultivation, and furnish the 308 millions of kilos. of roots annually delivered to the sugar factories. The price of the beet-roots probably approximates to \$4.75 per ton, delivered at the factory. In certain cases they have even paid from \$6.25 to \$7.50 per ton. The average amount of the harvest will therefore be \$1,441,000, without including the leaves, the produce of which per acre is about equal to 5,300 lbs. of hay.

RAISING EARLY POTATOES.

FROM THE ENGLISH COTTAGE GARDENER.

Early Potatoes.—In a prize essay written upon the cultivation of early potatoes, by the Rev'd Mr. E. F. Manby, of Lancashire, we find the following sensible remark relative to the case that is taken with the seed:

The great drawback to the cultivation of the early potato, is the injury inflicted by the severity of the spring frosts. But these are less severe by the sea-coast than inland. Even at a distance of four miles it has been observed, that the frost has been very sharp, whilst by the sea-coast there has been little or none. Consequently, the plants have been much injured inland, whilst they have escaped with little or no injury along the sea-shore. So, again, there is the local advantage of a suitable soil; for here it may be remarked, that potatoes growing upon *hard* land, or a sandy loam, for instance, will escape the frost, whilst the next field, moss or clay, will be cut down.

It would then appear that there is great uncertainty with regard to the value of the produce; and so there is: but the uncertainty is, whether you realize £50 or £70 per acre. Those potatoes are only planted which are known to recover quickly from the effect of the frost. Indeed, we can scarcely remember a year in which the potatoes have not been cut down once or twice, when one or two inches out of the ground. After such a catastrophe there is a general lamentation, "Fair frozen clean to t' ground; waint be worth a farding." But the knowing ones take it very quietly; for they know that the frost will have been more severe inland, and that others must have suffered more; so that in the end they will be rather gainers than losers.

It is, however, strange how little known the kinds of potato are, which are here so profitably cultivated. In other districts, we have found the *Ash-leaved Kidney* in high favor. They have been tried here, and are found by no means equal to the *Lemon Kidney*, which is equal in production to the *Ash-leaved*, earlier in forwardness, and far superior in flavor and quality. There is always great difficulty in obtaining good seed. Genuine seed commands a high price, and not without reason; for the growers take the greatest pains in cultivating the seed for their next year's crop. For example, they set not the small refuse which is generally done, but select equal, well-shaped tubers as smooth as pebbles; and as soon as any one shows a flower, it is immediately eradicated. A flower to an early potato is considered a sign of deterioration, the first symptom of growing out; it being contended that all the strength of the plant should be thrown into perfecting the tuber, and not be spent in the opposite extreme. However this may be, it is certain that a plant when it has shown a disposition to flower, is not so early in perfecting its tubers, and that the seed set from such a plant will shortly produce tubers irregular in shape, and deformed by little knobs and excrescences. The more forward, the earlier, the sooner it is ready to be taken up for use, the higher price it will command; and the more perfect and equal in shape, the more valuable, because there is less waste in preparing it for the table. And here I must beg to correct a misstatement. It has been frequently remarked, that potatoes are not good to eat till winter comes in; and generally speaking, there is a good deal of truth in the remark. In many countries we could name, what is there called a new potato, is one of the worst and most unwholesome of vegetables. "How can you like new potatoes?" we have been asked, with a look of surprise expressive of commiseration; "they are such heavy, waxy, indigestible things;" and so they are.

Biting Ladies' Horses.

BY HARRY HIEROVER.

It must be evident to almost every one that there is a vast deal more difficulty and nicety required in biting a horse so that he may carry a woman pleasantly than is required as regards horses for men's use. In the first place, those trained for the use of the former are brought (or ought to be) to much more delicate mouths than those only intended for men's service. We are not anxious about the pleasantness or safety of the latter. If we see a man riding a boring, heavy-headed brute, we merely remark, "How that fellow lets his horse bore at him!" If we see a fellow run away with, the only commiseration he gets at our hand is expressed by the slang phrase of the boys in the streets, "There he goes!" We expect if a man has bought a brute he will find means to make him otherwise; if he can not, we only say, "What has such a tailor to do on a horse?"

The great difficulty in biting a horse for a lady is much enhanced by their being prone to use the curb-rein; this would not be as objectionable as it is if ladies would figuratively throw the rein on the horse's neck when walking; this would afford him ease for the time being, and allow his mouth—that has probably become to a certain degree benumbed by the pressure of the curb-bit—to recover its tone. The reason ladies use curb-rein in all places I apprehend to proceed from this—it saves them trouble, and, further, obliges the horse to carry himself, when in a slow pace, in such form as is pleasing to most of our fair friends. But let me assure such that a really beautiful, finely-shaped horse shows himself quite as well when permitted to carry his neck and head in a natural position as when constrained by a curb. I do not attempt to say that such is the case with a common, ill-made hack; but we will not contemplate the anomaly of a lady being put on such an animal.

Ladies will, I trust, from what I write, give me credit for its being my heartfelt desire to see them mounted as they wish; and, next, to (at least) attempt to give them certain hints as I (with deference) conceive likely to facilitate their progress towards becoming horsewomen; but in doing this I am constrained, *malgre moi*, to point out peculiarities—I do not still say faults—that some ladies indulge in, which militate against their becoming so.

It may be observed by any one who has paid as much attention to ladies' riding as I have, that very young riders never allow their horses a moment's peace. If they call at a door to leave a card, or meet the carriage of an acquaintance and stop to speak to its inmates, they are touching their horse with the whip; this causes him to move on, or turn from the carriage; they are then under the necessity of wheeling him round in order to get him within speaking distance of their friends. Whether they do this to show his impatience and spirit, or that they have him under control, I know not; but I should think the wiser way would be when he is standing obediently still to permit him to continue so till required to move on. In some elucidation of what I mean and say, next door to where I am staying are a number of young ladies who ride the horses of a riding-master for a couple of hours. We might naturally expect that after their ride, on their return, they would throw the reins on their horses' neck, and let him stand quiet till it was their turn to be assisted to dismount; but no the curb-rein is still held, and a little flick of the whip causes the horse to move on, or in some other direction; he is then wheeled round, and making a small circuit, returns to the spot where he first stood, where he would have remained had he been permitted to do so. Whether the young lady considers this a short *ad libitum* ride in addition to the one she has had, or whether, as in the former case, she is considering it showing her power over her steed, is not for me to say; but I will venture this remark, let it proceed from which it may, it is an act "more honored in the breach than in the performance." There is another practice that some ladies patronize; this is the working (I must call it) of their arms when in a walk, like a training riding lad. The latter can scarcely help doing this; as I have before observed, their horses stride so far in this pace that the boy's body yields to the motion of the animal, and the arms follow that of the rider's body. But be it remembered, these boys ride somewhat hard-mouthed horses, and those mostly in snaffles, so that the pull on the lad's hands and arms is really forcible; but a lady practicing the same thing should remember that she has the feelings of a tender mouth to consult, and her horse seldom steps long enough to require her to give and take with his motions; so the action of her arm has only the bad effect of continually jerking the curb-bit against the horse's mouth when it is not wanted. If the ladies would ride in a walk holding the snaffle-bridle only, the motion of the arms to which I alluded may be indulged with impunity, if such is the lady's pleasure; it can then do little harm; it is, or then would be, but at most a harmless assumption of a peculiar style of riding.

I think I can show ladies the comfort and ease they would derive from using the snaffle-rein when walking, or the curb, if they wish it, held also in the same hand, but of such length as not to be felt by the horse. I believe ladies will admit that they do not require much control over their horses in a walk, or at all events, not more than a good-mouthed horse will yield to with the snaffle only. Going for a time on this bit, the moment the curb is touched the horse becomes on the *qui vive*, he feels something is about being demanded of him; he either bridle up and steps shorter, or the slightest touch of the whip sets him off in a canter.—*London Field*.

FARM MISCELLANEA.

Mr. Peyton Johnston's Swine.

FROM THE AMERICAN FARMER, BALTIMORE, MD.

During the continuance of the Fair we found opportunity to visit some places in the environs of Richmond, and among others, in company with the most hospitable and energetic proprietor, the neat little country seat of Peyton Johnston, Esq., about three miles from the city. Here, besides the place itself and the very complete arrangements for supplying the dwelling and garden, and all the out-buildings, with water, by means of hydrants, fountains, and other contrivances, through pipes leading from two water-runs, placed near a small rivulet, we found abundant to interest us in Mr. Johnston's very complete arrangements for feeding, keeping, and breeding swine. This is a kind of live stock, in the rearing of which, Mr. Johnston has engaged with his usual energy, and with such enthusiasm as to make it a speciality; and, in consequence, animals from his pens are always successful competitors at agricultural fairs, and having become widely celebrated for purity in their several breeds, are in great demand.

The piggeries we found complete in every respect—the larger portion being built around the sides of a hollow square. Each boar and breeding sow had their own separate quarters, consisting of a wooden pen raised some eighteen inches from the ground; the front half being open to the weather, and the rear forming a covered apartment closed in on all sides, except the front, where a low door, wide enough for a man to enter, gave access to its luxuries. These pens, for fear of any accidents or mistakes, are kept under lock and key, so that no one but the proprietor or his most invaluable swineherd, the jovial "Jimmy," could remove any of the occupants.—

The floors of these pens are made with a slope of two inches to the foot, and are of slats of thick plank; for Mr. Johnston never pens his hogs immediately upon the ground. The roofs are made of plank on which is laid thick sheathing paper, (costing from three to four cents a sheet,) which is held in position by thin strips of wood, nailed on it at intervals of about two feet. Gas-tar, made thick with common resin, is then poured on, boiling hot, and a coat of sand and gravel instantly spread over the whole. This is found to make a very cheap, durable, and waterproof covering. Every possible care seemed to be taken to keep the animals in perfect health, and that the whole establishment should be as clean and neat as possible. To this end, a large square wooden tank, about ten feet long and five feet wide, was sunk in the centre of the hog yard. This is filled with water, into which is thrown ten pounds of roll sulphur, sufficient to last two months, and constitutes the bath, which, at proper intervals, each hog is permitted to enjoy, in turn. The sulphur has the effect of removing vermin, and preventing cutaneous diseases.—To counteract disagreeable odours, Mr. Johnston usually sprinkles a handful of copperas, as a disinfectant, on such spots as require it. It costs but a trifle, and is eaten by the hogs without injury when thrown into their feeding troughs.

Near the centre of the hog-yard is a large boiling and steaming apparatus, where the food for the hogs is mixed and prepared.—The proportions are two bushels of mill sweepings in 60 gallons of water, so as to make a thick paste. Garbage obtained in abundance from the hotels in Richmond, is added. During the winter, Mr. Johnston also feeds his hogs on turnips, cut up, and boiled with a small quantity of mill sweepings. A hydrant in the hog yard is supplied by the water rams we have mentioned, and saves all trouble in filling the bath and the boiler.

Mr. Johnston has between 70 and 80 hogs, and all of the first quality, of their several breeds; in fact he will have none but the best, being determined to rear no inferior animals, so that those from his establishment may always be fully up to the standard of the high reputation they have already acquired. The breeds at present preferred by Mr. Johnston, and of which we saw specimens of both sexes of the highest excellence, and of every age, are the *Chester, Improved Hampshire, Virginia Grazer* and *White Berkshire*. To these are about to be added another breed but little known to the public, but much esteemed by a distinguished farmer and planter, near Herndon, Burke Co., Geo. We were particularly struck with the excellent points of the improved Hampshire Boar "Frank," and considered this the finest specimen of a Boar in the class of swine, to which that breed belongs, that we have ever seen; we gave him the preference over all in Mr. Johnston's pens, of every breed, age and sex. Mr. Johnston finds the Hampshires exceedingly docile, gentle, easy to fatten, and of rapid growth. An account of Mr. Johnston's imported Hampshires may be found in the *American Farmer*, for August, 1856.—"Frank" was sired by the imported Hampshire "Duke," the latter, however, but little the inferior of the son. The Hampshire sow "Princess," and the two animals with the Shakspearian names, "Anne Page," and the huge Chester Boar "Sir John Falstaff," were all very superior, and have all taken premiums, we believe, at several Agricultural Fairs. For family use, and where only a small number are required for home consumption, Mr. Johnston recommends the Virginia Grazer.

HOME NOTES.

Utility of Stump-pullers.—Another great hindrance to farming in Hillsdale County is the stumps which cover our newly cleared fields.

This is an age of progress. We cannot wait for the stumps to rot out before we introduce the labor-saving machines. One of the greatest inventions showing the triumphs made by mind over matter, is the invention of the machine called the Stump Puller. With this machine in a field that has been chopped three or four years, about one hundred stumps can be pulled in one day. The machine costs about \$250. One machine would supply the wants of a large neighborhood. If three or four farmers would combine, it need not be expensive to those wanting to use it. Mr. Sinclair, of Fayette, and Geo. W. Underwood, of Hillsdale, each own a machine that is doing good service. Those wanting to see what Stump Pullers can do, would do well to examine the fields of Underwood, and compare those cleared of stumps with those where the stumps remain.—*D. L. Pratt's Hillsdale Address*.

Uses of Stones.—The stones which cover many portions of our country, are considered by many as not only useless, but an actual damage to the land. Lying promiscuously about upon the ground they are a vexation, and a nuisance to the farmer. They encumber our roads to the great wear and tear of man, beast and vehicle; they lie concealed in our ploughed grounds ready to destroy our modern improvements for tilling the land. They overspread our meadows and grain fields, making haying and harvesting slow and tedious, and preventing the use of horse mowers, rakes, reapers and other labor saving machines. But properly used and placed, these "hard heads" are a source of wealth to the farmer.

Where they are abundant and near at hand they make the best and most durable fences. Lewis Emery informs me that he and his three boys (the youngest 18) drew and laid up ten rods of stone fence in one day. The fence was two and a half feet high. Upon the top of the wall he placed a rail, over this he drove stakes, and placed another rail upon

the stakes. This made a fence that will stop any domestic animal that ought to run at large, and did not need repairing for five years. C. W. Ferris, on his farm south of Hillsdale, has the best specimen of a 4½ feet stone wall I have seen in the country. The cost of laying it up was one dollar per rod. Now, considering that board or rail fences have to be rebuilt as often as every ten years, and that stone fences never decay, you can readily figure out which are the cheapest where stone are abundant. And yet many farmers let their stones remain upon the surface of their tilled ground, and waste their strength and wear out their ploughs in moving them about, when a little extra labor would convert them into the most durable fences. Again, stones are valuable for blind ditches; and all wet lands pay well for draining. In fact they are worth very little without drains; and the expense of making them is trifling compared with the profit they bring the farmer.

Many more stone ought to be used in building barn cellars and basements. There is no part of the barn that brings a better return for the money and labor invested than stone basements and cellars. It is the experience of every farmer, who has tried the experiment, that animals winter better, and with less fodder, which are warmly stabled and sheltered, than those which are exposed. In fact it is out of the question to raise, with any success, our improved breeds of cattle, horses, hogs and sheep without comfortable stables.—*D. L. Pratt's Address at Hillsdale Co Fair*.

Weight of Hogs.—J. H. Gardener of Centerville St Joseph County, sends the weight of hogs killed by him to the *Chronicle*, showing their live weight compared with their dressed weight.

No.	1 weighed	312 lbs gross,	268 lbs dressed.
2	"	312	268
3	"	385	286
4	"	319	276
5	"	200	169
6	"	185	165
Total,	1662	1422	

First four were fifteen months old, fed on corn in the ear, and house slops. Their loss is fourteen pounds to the hundred. 5 and 6 were between seven and eight months old, fed in the same way three months, loss about one sixth.

An Ice House that is no Ice House.—Ice in the hot days of mid-summer, is a luxury, and no mistake—and no man who has a family need be without on account of expense. Our exchanges are giving their readers directions about building ice-houses, packing ice, &c.

We propose to give our readers a new recipe—new to us at least.

J. W. Thorp, of Hillsborough Bridge—one of the inventive men of the day, kept ice out of doors, and had a plenty to spare last September. He threw down four foot wood upon a space 8 feet square, sufficient to keep the ice from the ground. The spaces between the sticks were filled with sawdust or tan. The ice was then packed snugly, in pyramidal form to the height of 10 feet. To make the mass more compact, in order to keep the air from it, a few pails of water were thrown over it. The mass was then covered with sawdust.

We are inclined to think ice will keep in this way better than any other. The evaporation from the outside carries off the heat, and the mass keeps cooler than it would if shut up in a tight house. There appears to be philosophy in this method.—*New Hampshire Journal of Agriculture*.

Flax.

"I would prosecute any man in this town who should sow flax upon his farm; at least, should any tenant on my land attempt its cultivation, I would pursue him to the extent of the law for a most glaring offence against the soil, its complete destruction and absolute worthlessness."

Having resolved to cultivate a small patch of flax the coming season, and never having had any definite knowledge of the peculiar process necessary to render it a valuable as useful crop, I was induced to apply to a venerable neighbor farmer for advice, who promptly exclaimed, in his magisterial capacity, "You had better let it alone!" to which was added the above cautionary injunction.

Now, Mr. Editor, not wishing to be totally foiled in the innocent resolution thus formed of raising a little flax for its useful fibrous qualities, and at the same time having the organ of veneration moderately cultivated, of a peaceful disposition, a law-abiding citizen, and not desiring to even injure my own land, I take the liberty of applying through your journal for advice. Perhaps there are others who have resided in Michigan 19 years, and tried more than three different parts of the State with flax, whose encouragement would be more cheering. There may be those, too, who have profitably raised flax at the east, and followed its cultivation here with other equally remunerative crops. It is not claimed that our soil is uncongenial to its culture, but that the land can never be reclaimed for any other crop. If this be the sad experience of Wolverinedom universally, Germany, Ireland, and other eastern lands must continue to supply our many wants, political economists declaim in vain against imported fabrics, our Dutch and Quaker friends must return to more propitious climes.

Query—Why has not our State Agricultural Society ever offered any premium on flax? Information is solicited by friends in various localities.

NEW ADVERTISEMENTS.

A. FAHNESTOCK & SONS, 900,000 Trees.
F. E. ELDER, Glen Black Hawk.
H. GREELEY & CO., The N. Y. Tribune.

ANSWERS TO CORRESPONDENTS.

A Horseman.—The pedigree of American Eclipse in an extended form, with all its collaterals, would occupy a page of our paper, and is too long to be published. It may be found in tabulated form in Herbert's work on the Horse of America.

Inquirer, Farmington.—The mere fact of an animal being ruled out for want of compliance with the rules of the State Society, does not necessarily rule the animal to be defective in blood. It only shows that the exhibitor is careless or unable from accident or design to meet the requirements of the Society, and on him rests the burden of proof. We have a case of this kind which came before the Executive Committee of the State Agricultural Society, at its late meeting, and which will be stated at an early day, as it possesses much interest.

O. J. O., Vergennes.—Your inquiry is answered, will send you the clover seed whenever you wish.

NOTICE.

The "Editors and Publishers Association of the State of Michigan," will hold an adjourned meeting at Lansing the third Thursday [20th] January 1857. A full attendance of all Editors, Publishers and Printers in the State, are particularly requested, as there will be business before the Association of vital importance to the "craft" of the State. Editors and Publishers from abroad are invited to join us at that time. SETH LEWIS, Pres.
GEO. W. PATTERSON, Sec'y.

MICHIGAN FARMER.

R. F. JOHNSTONE, EDITOR.

SATURDAY, JANUARY 8, 1859.

OUR SECOND NUMBER.

We present our second number of the WEEKLY FARMER, to our friends and readers, with a feeling of satisfaction, arising from the fact that we have in a great degree proved that a good first-class weekly agricultural paper can be produced in Michigan, as well as in other States. Whether it can be sustained or not, is a problem that remains to be solved. We are not too confident. Meanwhile, the letters of encouragement and of satisfaction received from various quarters, as well as the general expression of kind welcome and of encouragement uttered on all sides, by the press of the State, and by many of our contemporaries in other States, urge us steadfastly to push forward in the path we have opened up, and manfully to meet the difficulties in it, and conquer them if it be possible.

THE MICHIGAN STATE AGRICULTURAL SOCIETY.

The Executive Committee of the Michigan State Agricultural Society held its annual meeting in Detroit during the last week of 1858. The meeting was one of considerable interest, as many important changes were made in the rules and regulations, and in the premium list for the coming year. Amongst these, probably none will have a more beneficial effect than the change which opens the competition in all classes of stock to the stock breeders of all our sister States and to Canada, as well as the rest of the world, if they choose to come here and compete. We hope at our next fair to see the horsemen of Vermont and Kentucky, and the cattle breeders of New York, Ohio and Illinois, as well as of Kentucky, present with some of their best produce. We have men amongst us who do not fear to meet them, and who will not begrudge them the premiums, if they have enterprise to win them. In the classification, also, there have been some important changes, which we will note more at length in future numbers. In the division of horses, two new classes have been formed, one especially for horses claimed as Black Hawk or Morgan, in which the exhibitors have got to show a clear descent on one side from Justin Morgan or Hill's Black Hawk; the other class is for half or three-quarter bred horses, from thorough bred sires. There are some other improvements in the list which has undergone, in part, a thorough revision, but has not as yet been copied out for the printer.

THE REPORT OF THE STATE BOARD OF EDUCATION.

We present, with this number, the Report of the State Board of Education, which will be followed by the report of the President of the Agricultural College. These documents are eminently worthy of the attention of all the leading agriculturists in the State, as developing more fully the plan of that institution, than any reports which have yet appeared.

HOME PRODUCTIONS.

When we are applied to by parties desirous of making purchases of stock, or other articles, as is frequently the case, we esteem it our first duty, and a pleasant one also, to point out this breeder's cattle, that other breeder's pigs, and another one's sheep, as well worthy of an examination. These men have taken some pains to bring stock into Michigan; they have been at some expense to build up the interests of the State, and they have exercised their skill and capital to the best of their ability. They have not had the

fortunes left them by progenitors, which the wealthy breeders of New-York and Kentucky have, but they have as much skill and energy, and are entitled to a first consideration, and they always have it at our hand.—We wish we could say, in return, that we too had that same consideration at their hands. But this is not so, nor is it to be expected, whilst western men can be tickled with eastern straws.

FARMERS! LOOK AT THE WOOL MARKETS!

On the first of last June, the MICHIGAN FARMER took particular pains to impress on all its readers that the supply of wool would be short, and that the clip then about to be shorn would not be as large as that of previous years. The MICHIGAN FARMER was the only agricultural or family paper that took that position and maintained it. Its assertions were contradicted by eastern papers, but nevertheless we then proved that we were right. Since that time, we have been frequently told that we aided then in adding to the wealth of Michigan from twenty to thirty thousand dollars, in the enhanced prices which her farmers who read the MICHIGAN FARMER obtained for their clips. Look at the reports of the eastern markets which we now quote in this paper, and compare them with our reports of last June and July, and then take up your files of eastern "rural" agricultural papers, and find out, if you can, how much they then aided to put the farmers right on that one single, important point, or to sustain Michigan interests.

In cases where subscribers have been furnished with the first number, they will oblige us by notifying the agent who gets up the club, or to whom they pay their subscription.

New Books.

THE TRIBUNE ALMANAC. Published by H. Greeley & Co., New York.

This cheap record of political statistics has been sent us by the publishers. Its price is only a shilling, but none interested in politics could afford to be without it, did it cost a dollar; as a handy reference, for the names of the officers of government, the members of Congress, the results of elections throughout the States and the titles and substance of the public laws passed at Washington, it is unsurpassed.

ANNUAL REPORT OF THE BOARD OF REGENTS OF THE SMITHSONIAN INSTITUTION FOR 1857.—Printed by order of Congress, Washington.

The report for 1857 has reached us from the Institution. This volume is remarkable as containing the report of a committee to which had been submitted subjects of difference between the Secretary of the Institution and Prof. Morse of telegraphic celebrity. In this report Professor Henry is sustained on every point, and we think justly. There is in this report an admirable summary of a lecture by Professor Le Conte on coal, and on the vastness of creation by Professor Alexander. The report on Meteorology is of much interest; and also the report on the recent progress of Physics. The volume is one that might be printed better, especially as Congress pays amply for better paper and superior workmanship.

The efforts of the Institution to perform the duties imposed by the will of the founder seems to be as nearly correct in all particulars as could be desired. Many works of science, which no publisher would undertake, have been issued on account of the assistance given by the number of copies guaranteed to be taken by the Institution. Amongst these we may name the great work of Agassiz. There are many others, even more abstruse and special, which never would have passed from the manuscript, but for the aid which the bequest of Smithson afforded. So long as the Institution thus fulfills the functions it has undertaken, we can only desire that it should enjoy the respect and confidence of the people.

TRANSACTIONS OF THE NEW YORK STATE AGRICULTURAL SOCIETY FOR 1857, VOL. XVII. Published by order of the New York Legislature.

We are indebted to the Secretary, B. P. Johnson, Esq., for a copy of the Seventeenth Volume of the Transactions of the N. Y. State Agricultural Society. The present volume is one of great interest to the Agriculturists of N. Y., and its contents compare favorably with any of the volumes which have preceded it. We have here the eloquent address of the Hon. Edward Everett, and a series of essays original and selected from the best sources, which are of the highest value to stock breeders and practical and thinking farmers. This volume also contains the Fourth Report of Dr. Asa Fitch on the Insects of New York; which is confined to the tribes that infest the pine tree families. This division is quite interesting, but not so much so as those previous ones which described insects which it was the constant aim of the farmer to destroy or prevent the multiplication. We shall take occasion to revert to this volume again from time to time, as much of the improved practice it describes is applicable in Michigan.

The Home Journal, comes to us dressed in all the glory of new type, and bringing the musical rhymes of Geo. P. Morris, and the exquisite essays of Willis. But what could have possessed "Mi-boy" to sing of "cherry times" at this inclement season we cannot imagine, unless it was the multitude of "swallows" he had the good fortune to observe as being "all around" on New Years Day.

The State Teacher's Association assembled in Convention at Jackson on the 27th of last month. A large number of gentlemen interested in education were present, amongst them were Professor Winchell, of the State University, President of the Association; President Sines, of Albion; President Fairchild, of Hillsdale; Hon. J. M. Gregory, Superintendent of Public Instruction; elect; D. M. Fox, of Lyons; Hon. E. B. Pond, of Ann Arbor; Hon. E. C. Palmer, of Niles; and D. B. Green, Esq., of Ypsilanti. Various changes in the School Law were considered and discussed by the Convention, and measures taken to present the subjects to the next Legislature for its consideration.

History of the Agricultural Press of Michigan.

BY J. L. TAPPAN, LIBRARIAN, MICHIGAN UNIVERSITY.

Continued from page 5.

There was a small weekly paper issued in Detroit, towards the close of 1849, under the old name of "Western Farmer," edited and published by G. W. Pattison, late printer and joint publisher of the "Detroit Bulletin," which had been merged into the "Free Press" a short time previous. It contained four pages of agricultural matter, the rest being of a miscellaneous character. This was the second attempt, within a few months, to start another agricultural journal in Michigan, the first having been made at Adrian, the name of which, however, I have not been able to ascertain. Although strong efforts were made to attain success, both attempts proved an entire failure, the "Western Farmer" having been discontinued in February, 1850, after a brief existence of three months, and the Adrian paper, as far as I am aware, has not been heard of since. It was evident that more than one agricultural paper could not be sustained here for many years to come, and the "MICHIGAN FARMER" was rather too sturdy to be easily upset.

On the 1st of December, 1852, the first number of "The Farmer's Companion and Horticultural Gazette" appeared. This was a quarto journal of 16 pages, published monthly in Detroit, at fifty cents a year, under the joint charge of Messrs. Chas. Fox and Chas. Betts, with Linus Cone as Corresponding Editor, and J. C. Holmes as Horticultural Editor. In their prospectus the editors especially dedicate their paper to young men. They say, "we earnestly look to them to carry on what others have commenced. The next twenty years will see greater improvements in agriculture than many past centuries have produced; and to be able to make use of them as they appear, it is absolutely necessary that our minds should be prepared by study, and that we diligently keep ourselves informed both of all that is known, and of all that is wanted." They took as their motto, "To do good, and render others happier, wiser, and more prosperous," and the columns of the "Farmer's Companion" bear witness how well this motto was observed.

In the first volume the senior editor, Rev. Charles Fox, commenced a series of translation from the French on the "Diseases of Cattle," and in the fourth number the first of a series of articles on "Manures" appeared, "from the pen of the most eminent Agricultural Chemist of the day"—the late Prof. Jas. F. W. Johnston. This volume also contains a letter from the late Dr. T. W. Harris, on the "Apple Worm," besides a variety of interesting correspondence from Wm. Adair, J. G. Morse, L. U. Trask, A. C. Hubbard, M. Freeman, A. Y. Moore, and many others. The editors began with an edition of little over 3,000 copies, but these having been exhausted, they were obliged to close the first volume in June, 1853.

The second volume was commenced on the 1st of July, 1853, and closed in December following, comprising six numbers. This volume contains a number of engravings, and is enriched with instructive communications from E. Mason, Justus Gage, T. T. Lyon, S. M. Bartlett, and others. A "Stock Directory" is opened in the first number, and Dr. G. H. Dadd furnishes an article on Veterinary Medicine. There is also a controversy respecting the "Rise of Sap," between J. Whipple and H. R. Schetterly.

The third volume began on the 1st of January, 1854, having assumed the new form of an octavo of 32 pages. In this volume, Dr. M. Freeman, of Schoolcraft, commences a series of articles on the breeding and management of poultry. The fifth number contains a list of the grasses indigenous to or introduced into Michigan, most of which were received from D. Cooley, of Washington, Mich. There are communications from F. V. Smith, Geo. Tibbitts, E. H. Crippen, George Clark, and others.

The fourth volume commenced July 1st, 1854, the previous one embracing but six numbers as usual. Engravings are given of French Merino sheep, owned by J. D. Patterson, of Westfield, N. Y., whose interesting letter on this class of animals appears in the last number of the "WEEKLY FARMER." There are communications from W. W. Gough, A. Y. Moore, Geo. D. Norris, T. T. Lyon, J. D. Yerkes, A. Sayer, and others. The second number gives a short sketch of the late Dr. Houghton, together with some of his notes on the geology of Grand Rapids. The same number contains the mournful intelligence of the sudden and unexpected decease of the senior Editor, Prof. Charles Fox. An account of his life and labors is given in the next number, accompanied by resolutions passed on this occasion by the Faculty of the University, and the Vestry of St. Paul's Church, Jackson. This was the last number issued of the "Farmer's Companion," as it was left without a publisher by the death of Prof. Fox. Its readers and friends were in-

formed by Mr. Charles Betts of its consolidation with the "MICHIGAN FARMER," which was a highly desirable union, as it will be a long time before more than one agricultural paper can be well supported in this State.—Messrs. Betts and Holmes became associated with Mr. Johnstone in the editorial management of the "FARMER."

A brief notice of the lamented Editor of the "Companion" will not, I trust, be deemed out of place here. Mr. Fox was born in England, and was educated by the celebrated Dr. Arnold of Rugby School. He came to New York at 18 years of age, and engaged in mercantile pursuits at first, and afterwards studied for the Ministry. In 1839 he took charge of the Episcopal Church at Jackson, but soon left here owing to ill health. He purchased a farm on Grosse Isle, in 1843, and devoted himself, hereafter, to scientific agriculture. In the spring of 1853, he was requested by the Regents of the University to deliver a course of lectures on this subject, and they subsequently appointed him "Professor of Theoretical and Applied Agriculture." A foundation was here laid, by donations both from himself and others, for an Agricultural Library and Museum. The writer of this article well remembers the incessant efforts made by Prof. Fox to advance the interests of his department. His loss, like that of Norton and Downing, was felt over the whole country, and especially by the citizens of this State. The "Text Book of Agriculture," which contains the substance of his lectures, will be an enduring monument of his noble exertions in behalf of agricultural science.

In 1856, a folio weekly, called the "American Farmer," or "Rural," was issued at Kalamazoo, by E. Porter Little, at \$1.50 a year. I have never met with this paper, but I find it stated in a New York contemporary, that "each subscriber had the privilege of a free advertisement of thirty five words or less every other week," so that a great portion of its columns were thus occupied. This may have been a good way of obtaining subscribers, but they seem to have afforded rather a scant support, as I am informed that "it dwindled down very rapidly to a mere country paper, and did not outlive the year."

This completes the list of all the agricultural papers, as far as I am aware, that have ever been published in Michigan.

(To be continued.)

Scientific Intelligence.

The cigar shaped steamer now being built by the Messrs. Winans of Baltimore, is exciting as much attention as an experiment as the Great Eastern. All sorts of objections are raised, and the opinion expressed by the Scientific American, that the steamer will be a failure, seems to be the prevalent opinion of well informed scientific men. When the rocking uneasy motion of a bark canoe is taken as an example of the motion of a vessel without a keel, one will suspect that a vessel built on a large scale on the same model, will have something of the same motion.

A Mr. W. St. John of Lima, N. Y., has lately patented an improved sleigh runner attachment, which he uses near as useful as that known as the Bullard improvement, and of which we gave a cut last September.

Agricultural Patents issued for the week ending December 21, 1858.—John Badger of Barleyville, Ill., a broad cast seeding machine.

J. A. Barrington, of Frederickton Ohio, an improvement in Harvesters, and a raking machine with vibrating frame.

Chester Bullock of Jamestown, N. Y., attachment of vibrating cutter to vibrating bar and fingers.

H. T. Clay of Gardiner, Maine, improved shingles, that are of even thickness so far as they are exposed to the weather, and commence to taper from the line from which they are covered.

Obed Hussey, Baltimore, Md., an improved method of gathering and discharging the cut grain from the platform of harvesters.

J. C. McGraw, Smithfield, Ohio, an improved arrangement for elevating hay and grain, with the shears and hoisting fork.

Albert W. Morse, Eaton, N. Y., improvement in seed sowers.

Reuben Vincent, Rockton, Ill., an improvement in plows, being a combination of the convex standard, braces and mouldboard, arranged with beam and bent handles.

Francis T. Cordis, Long Meadow, Mass., improved label for trees.

C. W. McCormick, of Chicago, Ill., claims sundry improvements connected with his harvester.

A Cattle Car.—Dr. Wighton of Upper Sandusky, Ohio, has shown to the editor of the Ohio Farmer, a model of a patent car, invented by him. In this car the heads of the cattle stand all one way, each having a separate stall.—The bodies of the cattle are in contact, but their heads are held in place by a couple of perpendicular iron rods that allow vertical, but no lateral motion to the animal. Immediately beneath their heads is a trough running the whole length of the car, that can be filled with water, or used for feeding. We suspect, however, that the amount of time and labor required to load up such a car will render it not available on most rail roads. Getting up to stanchions cattle which have never been handled, or even been inside of a stable is work! and this patent for the ease of the animal will work better in a model, or in the Patent Office than on the road. The inventor should go to work, and find out a plan to *barley* the cattle into the stanchions, or invent a device which, at once tame them into good behavior for the occasion!

General News.

There is a great movement on foot in Great Britain to induce the government to give its aid to the Atlantic Telegraph company, and it is generally supposed that the aid sought will be granted. There have been several indications that the electric current occasionally passes over the wire laid down. De San'y has been obliged to open his eyes several times, and has spoken once!

The London Times opposes the project of another great industrial world's fair at London, which is said to have been started by Prince Albert.

Sir J. Inglis, the heroic defender of Lucknow, has again sailed for India.

The government authorities in the south-west of Ireland have been arresting a number of young men for treason. The treasonable acts consists in laying plans by which filibusters from America are to be introduced, and the country is to be seized by some visionary General Walker. The friends of the government must be a set of credulous fools, or they would not trouble their heads with the vagaries of a few veridant sons of the greenest of all islands.

The Irish potato crop is stated, after a fair investigation, to be the best that has been raised since 1840.

Ribbonism, a secret political organization, is alleged to be gaining a great ascendancy in Ireland, and the Lord Lieutenant has issued his proclamation against it.

The trial of Count Montalembert excites a deep feeling in France. His appeal from the sentence passed upon him was to be heard on the 24th of December.

In the south of France, violent shocks of Earthquake have been felt, to such a degree that the church bells of the city of Bayonne were rung by the motion, the walls of several buildings were cracked and the pavements in some of the streets displaced.

The Emperor of Japan is reported as dead.

The Queen of England, now takes the title of Empress of India, since the government of that country has passed out of the hands of the East India company.

The speech of the king Sardinia at a late review of part of the troops, is said to have created an immense sensation throughout Italy, and portends war. It was very short, and is translated as follows. "Gentlemen, let us be prepared, for it may happen, that next spring we shall be obliged to smell gunpowder again."

The Spanish expedition against Mexico is said to be very threatening.

The fog in London during several days of last December was so thick and dense, that some railway accidents occurred in the middle of the day, and the omnibuses had to stop running for fear of collision.

The rate of discount at the Bank of England is now only 2½ per cent per annum.

Toronto is now in direct communication with the flourishing town of Port Sarnia, and the northern part of Michigan by the Great Western Railway. There is to be one train a day. Leaving Sarnia in the morning at 8.45 for London, it will leave London at 2.30 P. M., and arrive in Sarnia at 7.30. The country through which the road passes is rich in soil and timber, and it also possesses beds of asphalt, which are likely to prove of great commercial value. The road will be of immense service to the section of country which is to supply it with traffic.

The building on Woodward Avenue, Detroit, occupied by the Daily Tribune, was burned to the ground, with all of its contents on the night of the 30th ult. The loss is estimated at \$25,000, on which there is an insurance of \$21,000. This is the third time that Mr. Barnes has suffered from fire. The Free Press aided Mr. Barnes to issue his journal the next day, and since that the office of the Tribune has been at the Advertiser office. Mr. Barnes, with his accustomed energy, promises soon to have his paper in full vigor again.

The State Legislature.

The two Houses of the Legislature convened on Wednesday, and organized by electing the following officers:

Senate—Secretary, A. B. Turner, of Grand Rapids; Enrolling Clerk, W. W. Bartlett, of Tuscola; Sergeant-at-Arms, E. Webb, of Hillsdale.

House—Speaker, Henry A. Shaw, of Eaton county; Clerk, C. V. Deland, of Jackson; Enrolling Clerk, W. A. Hall, of Livingston; Sergeant-at-Arms, C. H. Larzlarer, of Lenawee.

Governor Bingham then delivered an annual message, and Governor Wisner, his successor, also sent in a like document.

The message of the Governor treats of the debt of the State which is stated to be now \$2,387,629.67. He recommends that provision be made for \$40,000 which will be due in January 1860.

The State Prison at Jackson even when completed, will be found hardly sufficient for the increased demand of crime which in some respects outstrips even New York. Should crime increase as rapidly for the next three years as it has for the past, the present enlarged State Prison will be full. Although 160 cells have been built since 1857, they have all been occupied as fast as they were ready for criminals.

Attention is directed to the injury done to mechanics by State Prison competition.

There are now 58 young lads in the House of Correction, and it is recommended as worthy of being sustained by the requisite appropriations.

The Institution for the deaf, dumb and blind at Flint, will need an appropriation of \$115,000 to carry on this Institution for two years and to complete the buildings.

The Institution for the Insane at Kalamazoo, will need \$8,500 to finish the west wing which will then be ready for inmates and \$30,000 more to rebuild the central portion destroyed by fire last winter.

The completion of these buildings is recommended to be pressed forward with as little delay as possible.

During the past year there were taught within our State, one hundred and seventy-three thousand, five hundred and fifty-nine children, between the ages of four and eighteen years, at an expense of four hundred and forty-three thousand one hundred and thirteen dollars and seventy-one cents, for teachers wages alone.

The establishment of a separate department of the University for the education of females on a scale equal to that given to young men is strongly recommended.

It is recommended that the State Agricultural College be placed on such a footing as will permit it to accommodate two hundred pupils.

The establishment of an Emigrant Agency is strongly recommended, and the appointment of a State Geologist.

The passage of a registry law is instanced as necessary for the purity of elections.

The amendment of the laws relating to the construction of railroads under the land grants is suggested, and the modification of taxation upon such roads recommended.

The amendment of the Swamp Land Act is recommended, and also that 40 acres, subject to immediate taxation, be given to each bona fide settler for five years, the claim for drainage being waived; the money arising from sales to be used as the Legislature may direct, for draining purposes at some future time.

The payment of the traveling expenses of the Circuit Judges is recommended as necessary and just.

The fee system of paying Judges of Probate is pronounced wrong and requires alteration; the office to be paid for by a salary to be fixed by the Supervisors of counties.

The militia system is considered, and it is recommended that the formation of independent companies be fostered.

Preparations for the erection of a new Capitol is suggested as becoming more necessary every year, and also the appointment of an assistant to the Superintendent of Public Instruction.

The people of Gratiot county are in a bad state for the means of life, and ask for aid. It is recommended that the construction of a road through that and Isabella counties would afford the necessary relief.

Forty days in two years is not considered sufficient time for proper legislation such as the interests of the State require. Hence sixty day sessions annually are proposed as an amendment to the Constitution.

To meet all the requirements of the State, the Auditor General suggests that the rate of taxation be changed to one mill and a quarter upon the valuation. This would allow an appropriation of \$60,000 towards the erection of a State Capitol. These are the principal points of the message.

The Household.

"She looketh well to the ways of her household, and eateth not the bread of idleness."—PROVERBS.

EDITED BY MRS. L. B. ADAMS.

TO THREE SISTERS, WHO ASKED ME TO WRITE SOME RHYMES FOR THEM.

BY MRS. L. B. ADAMS.

I will not do as poets do
When asked for rhymes by timid girls,
Begin to praise your sparkling eyes,
Your rosy cheeks and silken curls.
Why should I spend my time and ink
Describing outward beauty, when
I know a common looking glass
Can do it better than my pen!

So of Maria's modest grace,
Sweet as a lily of the spring,
Of Ellen's thoughtful eyes and brow,
And Gertrude's smile, I need not sing.
The little mirrors where you stand
Braiding your tresses dark as night,
Will tell you better far than I
When lips are red and eyes are bright.

Nor have I lectures stern and cold,
To chill your hearts, my gentle friends,
Making you think that woman's life
Is joyless till in death it ends.
I fear this prosy business pen
Would soon refuse to write my songs,
If I could find no happier theme
Than walling over woman's wrongs.

I saw you in your peaceful home,
Three loving sisters, side by side,
Your guard a mother's tender love,
Your shield a father's glance of pride.
Yet yours is girlhood's common lot,
Its sunshine and its stormy strife,
You find some thorns among your flowers,
Some bitter with your sweets of life.

Your teacher gives you weary tasks
When you would rather choose to play,
The cat climbs to your blue bird's nest
And bears your little pets away.
Now Henry wants a sister's aid,
And Edward's hat is torn or lost,
Or Andrew's at some mischief'sly,
Or Nettie crying to be tossed.

Well, toss the darling in your arms
And make her happy while you may;
You'll find no purer joy in life
Than in an infant's artless play.
Give your young brothers cheerfully
Such loving aid as sisters can,
Thus will you cherish in their hearts
The true nobility of man.

Let Hope's sweet sunlight cheer your way
As on, with clasping hand in hand,
You pass through life's fair morning hours
A loved and loving household band.
Thus blessed and blessing may you live
Three loving sisters, side by side,
Your guard a mother's tender love,
Your shield a father's glance of pride.

NOTES FROM THE COUNTRY.

From various causes it has been impossible, during our last tour, to take notes on any subject (except the banks,) and we can now give only a hurried glance at the places passed through. To those who have had the good fortune to visit Albion and ride around the delightful country in its vicinity, it is needless for us to spend words in its praise; to those who have not, and especially to those addicted to fits of "the blues" in consequence of the "hard times" and the "suffering condition of the farmers," we would recommend a drive through the towns of Albion, Homer, Marengo and others in the south-western part of Calhoun county. If they are not cured of whining, for a week, at least, their case must be hopeless.

We had no time to make acquaintances, except what could be made in talking from the wagon while settling accounts, but some of these were too pleasant to be soon forgotten. In more than one instance where the men were gone from home, with the purse in their pockets of course, the ladies of the household have taken from their own, or borrowed of a neighbor the means to pay arrears and secure the FARMER for another year.

The village of Albion is just on the verge of Calhoun county, bordering on Jackson, and its chief feature seems to be the Seminary, where, we were told, there are about three hundred pupils in attendance.

At Battle Creek we had one tolerably pleasant day between two terribly stormy ones, and could not see quite all the subscribers, partly in consequence of their distance from town and from each other, and partly because Christmas was just at hand, and there was to be a family meeting at a quiet little village on the banks of the old St. Joe, and we knew that many eyes were anxiously watching for our arrival.

Battle Creek is a stirring, business place as its name indicates, and is surrounded and sustained by a fine farming country. We understand that it is soon to be a chartered city, and there is talk of changing its present significant and euphonious name to the hideous one of Wopokisko.

Our ride south, through the towns of Leroy and Athens, was in the face of a driving snow storm, and, except in Antrim, Shiawassee county, we have not found rougher or more dangerous, breakneck roads than those through the heavy timbered lands of Leroy. We were obliged to go many miles off the main traveled road, but had no occasion to regret it or complain of the terrible jolting, when at last we found our friends, glad to see us and ready to pay. The happiest man we

saw in that day's ride, however, was in the town of Athens. He was owing five dollars. We saw him in the barn-yard attending to his cattle, and drove directly in through the open bars. At the first mention of our name, he shook hands and said, laughingly;

"I know it, I know what it is; and I have money enough in my pocket to pay it. I've wanted it off my mind this long time, and am as glad to pay it as you are to get it."

We made out the receipt with the snow falling upon it and blotting the words as we wrote, and shall never forget the look of gratitude with which he received it, or the hearty good will with which he said;

"I'm so glad it's done, and I wish you as good luck everywhere."

His wish seemed prophetic, for all but one on that list followed his example.

It was after dark when we arrived at Loniadas, where we stayed over night and left at day-break for Burr Oak, the nearest point on the railroad by which we were to reach home—our parent's home, where sisters and friends were looking for us. We were with them before the shadows of the Christmas eve fell darkly over the earth.

Though a year had passed since our last meeting, business was too urgent to permit more than a three days' visit, and by Tuesday morning we were on the road again. The necessity of being in Detroit to attend to the opening of our new books and the entering of names fast coming in for the Weekly, prevented any long stoppings on the way, but we had the pleasure of seeing some old delinquents at Jonesville, Litchfield, Moscow, Reading, and Hillsdale, and the still greater pleasure of receiving our dues at their hands. In one or two of these places, also in some others we might name, we found that great injustice had been done the FARMER by men who have professed to act as agents, but who, instead of sending us the money when paid to them, have retained it in their own hands, and thus subjected us to the mortification of annoying our friends by presenting bills where nothing was due. In several instances individuals have paid agents and ordered the paper stopped, but neither the money nor the order coming to our office the papers have been sent on, to the great annoyance of Postmasters, who were uncharitably severe in blaming all upon us; calling us heedless, negligent, and so forth. We could have forgiven them all with better grace than we did, if, after mutual explanations, the unfaithful agents had been able to refund the money they had pocketed. As it was, all their fair promises could not quite restore the good nature that had been so outraged by unjust charges, and we came home more disgusted than ever with the newspaper credit system, and heartily glad that the FARMER is out of it, we hope forever.

To all the kind friends who generously assisted us at the several places named, we return most sincere thanks.

In the last number we spoke of having laid aside a few reflections for future use—The following notes may give some idea of their nature.

In passing through the few counties we have been able to visit during the past fall, no one subject has excited a more curious interest than that of the health of Michigan women. We have taken no notes of the facts as we went along, but will venture the assertion that for every healthy woman we have met, there have been at least nine complaining sickly ones. This may seem a startling and exaggerated statement, but we believe it is a true one; and, in the majority of cases, the ailments were either chronic, constitutional or hereditary, and not to be charged to the season, the weather or the location. In Shiawassee county there was much sickness throughout the summer and fall, among all classes, caused, it was thought, by the decay of half burned trees and vegetable matter in the swamps through which the great fire raged in the fall of 1856. Immense tracts of these lands are covered with fallen timber and stagnant water, and undoubtedly have a very baneful influence on the atmosphere, especially in the sultry weather of summer. Setting aside the sickness resulting from this local cause, we saw more healthy women in that county, in proportion to the number, than in some other counties where no such influence prevailed; yet we can count very few who could boast of perfect health, at least if appearance and action may be taken as grounds for judging. In Oakland, one of the highest, and, to all appearance, one of the healthiest counties in the State, the proportion of feeble, sickly women seemed fearfully large. In numbering them over in our mind, we have shuddered at the thought of what a painful sight it would be to see them all together. It is a sad thought that hundreds of our sex, who, to all appearance, should be the happiest, healthiest wives and mothers in our State, are dragging out but half a life, and leaving in many cases, enfeebled and diseased constitutions to the daughters who follow them. Still, as there is no prevailing epidemic, no plague to alarm the people, every one seems to think

all is right, though nine tenths of the mothers in a neighborhood may be more fit for hospital inmates than they are to perform the duties of the household.

We are very well persuaded that some pretty serious charges can be brought against our Michigan climate, but cannot think it is accountable for all the pale faces, and feeble forms that haunt the charming homes along the lakes and hills and airy plains of Oakland, Lapeer is a newer county, and our stay there being limited, and our business more with agents than individual subscribers, there was less opportunity for comparison in this respect. Many whom we did call on betrayed their Scotch or English origin by their ruddy cheeks as well as by their foreign accent; still, among Americans, the men seemed far more robust and healthy than the women. It has been the same in all other counties yet visited. Perhaps it is so in all other States, but whether it is or not, it is a subject which calls for the serious attention of the philanthropist and physician. There must be evil or wrong somewhere, either self inflicted by women, or otherwise. We call observing minds to note the facts in their own neighborhoods, and if we have, through too partial observation, misjudged the matter, we shall be glad to be shown a pleasanter side of the subject.

In the remarks we make, it is our design and desire, usually, to note only the most pleasing incidents, and to describe such scenes, people, improvements and so forth, as it would be agreeable to read about, and gratifying to know; still, it is not always policy to look only on the bright side, neither do we think it is serving the cause of true philanthropy to do so. It will not cure a man of fever to tell him he needs no medicines because his eyes are bright and his cheeks blooming. The philosopher and the philanthropist must learn to look on all sides of social and moral life, if they would rightly serve the cause of humanity. Their success lies in their ability to turn dark sides to the light, or to throw light into dark places. It would be a far more easy and grateful task for us to write pages descriptive of the pleasant people we have met, the happy homes we have visited, and the smiling faces that have welcomed us to them, but for once we have ventured upon a sadder theme, though claiming no ability to throw a ray of light upon the darkness with which it is invested.

The financial ruin of the past year has been in a great measure, charged to the extravagance of women; whether the charge be just or not, we believe they are now nobly striving to redeem their credit, and to prevent further mischief from the same cause. Both in the country and in country villages where we have been, the majority of housekeepers are doing their own work, without the aid of hired help, toiling early and late, economizing in dress and furniture, and using every exertion to save expense. It matters not, in many instances, if there are two or three or half a dozen hired men on the farm, or in the shop; a dollar or ten shillings a week can be saved by dismissing the hired girl, and she is dismissed. This is not right, it is not, in the end, good economy; but it shows that if women are free to spend money when it is plenty, they will go as far the other way to save it in a time of scarcity. There are hundreds, however, who are not driven to this unpleasant extremity; women who have been accustomed to hired help in the house, and, from habit, had almost come to think it indispensable; but, using their good judgment in the revulsion of the times, have taken household matters into their own hands, and find better health and more home-like quiet in the change. We have been with them in their neat and tidy kitchens, we have seen them at their spinning wheels, and have been shown the pantry shelves crowded with pans of milk, and long rows of cheeses, and pots of butter, so temptingly golden, the work of their own hands. To know the worth of such women, one only needs to go where they live, to see them as they live, and to judge them by their works. They are not half as scarce as some of our modern croakers over the degeneracy of the times would have us believe. Remember, we are speaking of women, and not of the Flimsy McWould-be's who sometimes assume that name.

GRACE GREENWOOD has been spending the summer and autumn at Dowagiac, Cass county, and writing letters to the Saturday Evening Post. She does not seem to take kindly to western people and manners, and thinks going to church in a log school-house is quite a different affair from attending worship in the grand cathedral at Rome. In her opinion the rivers of Cass county are not to be compared to the Thames and Po, and the country around Dowagiac resembles Italy only in one feature, and that is in *flea-time*.

We think this habit of dragging in foreign comparisons is as foolish as it is uncalled for; it is quite a mania with Grace, however, to advertise herself as a "traveled woman" in this way.

The late Madame Ida Pfeiffer's Journey to Madagascar (her last exploration) is preparing for publication.

THE ROSE-BUSH.

FROM THE GERMAN.

A child sleeps under the rose-bush fair,
The buds swell out in the soft May air;
Sweetly it rests, and on dream-wing flies
To play with the angels of Paradise.
And the years glide by.

A maiden stands by the rose-bush fair,
The dewy blossoms perfume the air;
She presses her hand to her throbbing breast,
With love's first wonderful rapture blest.
And the years glide by.

A mother kneels by the rose-bush fair,
Soft sigh that leaves the evening air;
Sorrowing thoughts of the past arise,
And tears of anguish bedim her eyes.
And the years glide by.

Naked and alone stands the rose-bush fair,
Whither the leaves in the Autumn air,
Withered and dead they fall to the ground,
And silently cover a new-made mound.
And the years glide by.

REFORMING THE WOLVERINES.

CHAPTER II.

Nearly a year passed before Dr. Mystie was again heard of among the Wolverines, and then it was rumored that he had married a young wife and was coming back to live in the little house by the hill-side; and, true enough, following the rumor came the Doctor and his wife. They were a strange looking couple; that little, wizened, gray-haired, almost toothless man of fifty-two, and his sprightly, dark-eyed, dark-haired bride of thirty. Everybody wondered how she came to marry him, but nobody wondered more than the poor bride did, when for the first time she peeped into her new home. Such a home as it was for one who had never seen a log house before. Such openings as there were between the logs where the turfchinkings had fallen out; such great cracks as there were between some of the floor-boards, while others of unequal width and length lay lapped upon each other in ridges. Such a pile of rubbish under the vacant bedstead, and such dusty cobwebs hanging about the cheerless walls! Poor thing! she looked the very picture of dismay as she withdrew her foot from the threshold and leaned her head upon the white gloved hand which rested against the rough-hewn casement of the door. Her husband took little notice of her just then, for the moment he opened the door he had discovered that during his absence several bricks had been removed from the mantle-bar above the fireplace, thus enlarging its mouth and leaving it in the form of an irregular arch, a shape which by no means suited his taste. He bustled about, cast rueful glances at the mutilated chimney, kicked the loose floor-boards and sputtered at the man who was unloading his wife's trunk and band-boxes. With all his philosophy, he had little patience in view of such an outrage, and perhaps would have shown as little mercy to the perpetrators could they have been discovered.

"Sophia," he cried, in a sharp, cracked voice, to his wife, who still stood at the door, "Sophia, can't you come in? You needn't expect to find Broadway palaces here in the woods! Something else to be done besides dressing fine and playing on the piano."

Sophia looked as if she thought so too, but she nerved herself up and went in with a brave heart, resolved to make the best of it. With her woman's taste and skill she soon succeeded in giving an appearance of tolerable comfort to the long deserted little hut. Before a week went by she had constructed a rude tester-frame over the bed, pasted newspapers over the rough walls, and decorated the side opposite the door with a small mirror, a picture and a few bunches of Princess Pine which she gathered from the woods. The little stand that served them for a table, was covered with a white-fringed cloth, a pretty work-box stood upon one of the trunks and a few choice books were on another, while over and around them all frolicked a playful kitten, the only animal the Doctor would tolerate about his premises, and he tolerated that only because it was less troublesome than the dozens of hungry little wood mice which would run races behind the newspaper tapestry and disturb his midnight musings by nibbling at the paste.

Meanwhile the reformer was not idle. In his absence he had read reform papers, listened to lectures, conversed with editors, and furnished himself with petitions, speeches, statistics and remonstrances, all tending to the overthrow of the "present system of society," and the establishment of universal brotherhood, untrammelled by any artificial restraints. And he went farther than this; he had documents to prove the justness and necessity of compelling government to make a present of the public land to city paupers; together with a full enumeration of the immediate blessings such a course would bring upon the human race. Thus prepared, he had returned, confident of success, to combat the prejudices and enlighten the minds of the Wolverines.

His reform in drink and diet began at home, and, as far as his example went, it ended there. Some knowledge of his ideas

of house-keeping may be gathered from the following conversation, which took place between himself and his wife about a week after their arrival.

It was a cold, dreary morning in November, and he was deeply engaged with his papers, arranging arguments and statistics, as was his daily custom, when his wife, who was preparing breakfast, interrupted him by saying: "Thomas, I can't make any thing eatable out of this flour and water; it wants yeast I think, or milk and saleratus, to make it light. I have roasted the potatoes as you directed, but they will be very dry without either butter or meat."

"What! is the butter gone so soon?" exclaimed the Doctor.

"There was but a pound you know, and that has lasted a week," said his wife.

"It might have lasted longer," he replied sharply. "But why isn't flour and water good enough for us now? I've made a meal of it many a time when I lived alone."

"Have you! and how did you do it?" enquired Sophia anxiously, for she was a novice at housekeeping.

"Why, this way," said the Doctor, snatching the dish from her hand and pouring the flour into a kettle of boiling water. "There, with a trifle of molasses, that will make a dish fit for any lady that promenades Broadway to eat of." Then throwing in a little salt and stirring it about with a knife, he added: "We have something of more importance to attend to than pampering these perishing bodies. We must cultivate the mind, not waste time in making nick-nacks and dainties for appetite; food should be plain, then the mind will be healthy. There, the potatoes will do with salt; think how many thousands would be glad of such a meal at this!"

"It is paste, nothing but paste!" said Sophia, after tasting of the mixture, of which her husband ate heartily. "I can not eat it; but the potatoes would relish very well if I had tea with them, or if I might make the coffee a little stronger, and have sugar instead of molasses for sweetening."

"The coffee is strong enough," said the Doctor; "a pound a month must be our rule, and at that rate we can have it three times a day strong enough for health. Tea drinking is all nonsense. You will soon get used to the taste of molasses; it is cheaper and goes a great deal farther than sugar. If half the time that is spent in pampering the appetite was given to improving the mind, we should have a different state of things."

Sophia did not contradict him, and having finished his breakfast he returned to his papers.

In this way they lived several days, but the Doctor either grew tired of his paste-pudding or of his wife's murmurings at roast potatoes and salt, and resolved upon a change. His usual hour for rising was three o'clock, and the time that intervened between that and daylight was spent in meditating by his fire; he never wasted candles; the light of the sun sufficed for reading, and the light of the fire for meditation. But one morning, not long after the above dialogue occurred, he was up a full hour earlier than usual, and meditating with uncommon energy, as Sophia could easily tell by the incessant hemming, hawking and spitting which greeted her ears, and by which he generally contrived to keep her awake after he had arisen. The day at length dawned, cold and cloudy, and without saying a word to his wife, the Doctor took a pail upon his arm and sallied forth.

At a distance of about a mile from where he lived was a house, which, though vacant when he went away, had lately been taken possession of by a family whom he had never seen, and who were quite ignorant both of the existence and importance of such a person as himself. Thither he now bent his steps, musing as he went, and sometimes chuckling to himself at the thought of having lived a young man so long and now becoming a bridegroom, and beginning the world anew in his old age. He tripped along with a light, fluttered step, placed his two thumbs firmly in the two arm holes of his jacket, and screwed his thin lips first to one side and then the other of his large mouth, to prevent the grinning smile from becoming too apparent as he approached his new neighbor, Mr. A., whom he found at work a little distance from his house.

"Good morning, good morning, Sir," said the Doctor; he always spoke very fast, but on this occasion he was so fluttered by an excess of youthful feeling that he sputtered excessively. That it might pass off as soon as possible he entered at once upon his business, informing Mr. A. that he had been a bachelor, and was now a married man, and added, while he exhibited his tin pail, "I have just begun to keep house, Sir—just begun last week, and come to see if I could buy or borrow a little pork of you—just a little, if you could spare it. We have flour and potatoes, but we have no butter nor milk, and we haven't any lard, but Mrs. Mystie thought if I could

get a little pork—just a little to grease the pan with—she could make some cakes for breakfast."

Mr. A. listened to this singular introduction, looked at the man a moment, and then invited him to the house, whither he had just been called to his breakfast. As they proceeded together, the Doctor gradually became calmer, and by the time he was comfortably seated at his neighbor's fire, he had regained full possession of his more sober faculties. Thinking that now would be a good time to sound the stranger's mind on the subject of reform, he began by remarking:

"A very corrupt state of society now; very corrupt indeed. In New York alone there are over fifteen thousand paupers, persons who in the morning don't know where they shall lay their heads at night."

"That is bad," observed Mr. A., glancing quietly at his meagre guest, who, with his shabby coat, his short brown pantaloons eked out at the bottom with blue cloth, a ragged shoe on one stockinged foot and a boot on the other, might have been taken for a straggling member of the said family of fifteen thousand. [He had a better suit at home, but he would not pamper his pride by wearing it on common occasions.]

"Society is wrong—all wrong," continued the reformer. "Civilization is doing the human race no good; the rich are growing richer, and the poor poorer; the system can't stand—it's all wrong. Why, sir, what right has one man to run over another? We are all brothers! But now the rich trample on the poor. The great nabobs of New York, what do they care for the paupers? They are brothers and should live on equality; but if they own a thousand farms they would give one to a poor, starving pauper! This whole western country should be divided into farms and given to poor people. It will be done—it must be. O, sir, I'm a reformer! I believe in having the world right. All mankind are my brothers, I love them as such—I would embrace them all in my arms, and make them happy!"

Mr. A. looked as though he thought such an embrace would be no great addition to his happiness, while Mrs. A. remarked that the disciples of Fourier had failed in many of their attempts to bring mankind to such terms of equality.

"I'm no Fourierite," cried the Doctor, instantly, "I want none of your ites and isms; all I want is the right. There's but one right and one wrong in the world; it's our duty to do the right and shun the wrong. These isms and ites must go down—sectarianism can't stand; the people are getting enlightened; we don't want to hear of this church and that church, my church and your church. Priestcraft, party strife and all such nonsense must be done away with; we are all brothers, and must live like brothers in one great family."

Here he paused to take breath, and as Mrs. A. did not reply, he flattered himself that for once, at least, his words had not been without effect; then turning to Mr. A., he continued; "That was a great mistake of Greeley's, the only one he ever made, that meddling with Fourierism; but he's a great man—a great reformer—done more good than any one man in the country; Horace Greeley, sir; have you ever heard of him?"

"I think I have," replied Mr. A., with a peculiar smile.

"A great paper he prints," resumed the Doctor, "that New York Tribune; the best, most independent reform paper in the world. Don't often see such a paper as that in this country, I think. I brought a copy or two with me—I was in his office every day for a week when I was in the city; I'll lend you one if you will read it—you never saw it I suppose?"

"Thank you," said Mr. A., "it would be quite like seeing an old acquaintance. I was always a regular reader of his New Yorker and afterwards of the Tribune, till within a few months past. I shall be much obliged to you for the loan of it; Mr. Greeley is an able editor and always published an excellent paper."

"Ah—yes—hem—you've seen the paper then. Never saw the man did you?" asked the Doctor, brightening up suddenly.

"No, I never saw him," said Mr. A.

"I was in his office every day for a week when I was in the city," repeated Dr. Mystie, proudly, as if this was a consolation of which he had no fear of being robbed. "I lived in the city once," he continued, "I graduated at the Columbia College, and practiced medicine a dozen years or so, but I never liked it—never felt at home in the business. It may suit other men, but there's too little chance for improving the mind or exercising the intellect for me. I've tried teaching, and I've travelled a great deal too; but, sir, for expanding the heart and enlarging the mind there's nothing like contemplating the great doctrines of reform. I've seen a great deal of the world, seen a great deal of wretchedness, sir, and am determined to do what I can towards leaving the world better off than I found it. I go for reform in everything."

"I think you told me you had but lately married?" observed Mr. A.

"Yes, about a month ago. I lived a young man a great while—married a young widow about thirty, and settled down for life on my little farm over here. You must come and see us—bring Mrs. A. over and get acquainted. We haven't much to treat company with but music, we have plenty of that."

"Are you a musician?" asked Mr. A.

"No, no more than to do my own singing; but my wife has been a music teacher; taught music a number of years in the city. She had a piano, she misses it very much now, but the transportation would cost more than one's worth, besides I bought her an accordion on the way, a very expensive one, cost five dollars in Buffalo. She cares more for music than for anything else."

Mr. A. remarked that as they were to be neighbors, they must endeavor to get acquainted.

"Yes," said the Doctor, rising to go, "come over soon; for my part I should like to have all my neighbors meet together at my house every Sunday, and spend the day in rational conversation"—here, remembering his unfortunate sabbath school, he quickly checked himself and added in a hurried voice, "The radical reformers are about starting a new paper, to be entirely devoted to our cause. It will advocate the removal of paupers from cities to the public lands here at the West. I subscribed for it when I was East, every subscriber is an authorized agent. I should be glad to get you to subscribe for it. Come over in the course of a week or two, I shall have one by that time—good morning, good morning, sir;" and he hurried away, frightened to think that he had invited a repetition of the outrage that had, been once practiced upon him, "for," said he to himself, "for aught I know these people are no better than their neighbors, though they were very civil to me. I'm glad I told them I had been to College and practiced medicine and traveled and taught school; such things have their influence!" With these consoling reflections he went home, satisfied that he had made a favorable impression on the strangers and resolved to continue the acquaintance.

Household Recipes.

A Good plain Pudding.—Fill a baking dish that will hold two quarts, nearly full of apples, pared and cut coarsely. On this sprinkle six table spoonfuls of sugar; then pour into the dish as much hot water as will cover the apples and sugar; let it bake about two hours. If the upper pieces of apple become too broken, push them down and oysters will take their places. This pudding should be eaten warm, with cream or milk and sugar. When cold it is an excellent substitute for *blanc mange*. It is economical, healthful, nutritious and delicious.

Hop Yeast.—Take as many potatoes as you wish—say a dozen—pare and boil them in just water enough to cover them. When they are boiled soft, mash them fine in the water, and thicken with flour while it is scalding hot, a little thicker than pancake batter; when it is sufficiently cool add a little hop yeast to raise it. When it comes up it will be fit for use, and may be used for bread or biscuit the same as any other yeast. This yeast may be kept from one to four weeks, according to the coolness of the coolness of the weather and the place you keep it in. It should be covered tight from the air. I keep it in a small mouthed jar, with an oiled cloth tied tight over it.—D. W., in *Northwestern Prairie Farmer*.

To Preserve Boots.—Take one part of rosin, two parts of tallow, melt them in a basin together, and heat the mixture till it boils, stirring it well. Apply this, while boiling hot, to the soles and outer surface of the boot or shoe, before they are worn at all, observing that they are perfectly dry. While this would injure the leather if it had been worn and was damp, when applied to a new boot, it fills the pores and preserves the leather soft and elastic.—F. A. Thompson, in *Ohio Farmer*.

To Clean Marble.—Take two ounces of common soda, one of pumice stone and one of finely powdered chalk; sift them through a fine sieve and mix with water, then rub the mixture well all over the marble, and the stains will be removed. Now wash the marble with soap and water and it will be as clean as it was previous to being stained. Sometimes the marble is stained yellow with iron rust, this can be removed with lemon juice.—*Scientific American*.

Testing Vinegar.—Louis Black of Detroit writes to the *Scientific American* as follows: "I wish to call your attention to an acetometer, made after Otto, where the test is chemical, and turns the tincture of litmus into a red liquid, and in neutralizing the acid by ammonia, it becomes blue. This acetometer is graduated so that in filling the first part with tincture of litmus, and the second part with vinegar to be tested, the mixture turns red; now by adding gradually aqua ammonia of a certain strength, till the mixture commences turning blue, the quantity used indicates the purity of the vinegar."

Delicious Dressing for Roast Fowls.—Spread pieces of stale but tender wheat bread liberally with butter and season rather highly with salt and pepper working them into the butter a little; then dip the bread in wine, and use it in as large pieces as is convenient to stuff the bird. The delicious flavor which the wine gives is very penetrating, and it gives the fowl a rich gamey character which is very pleasant. We recommend this dressing and testify to our personal high appreciation of its delicacy.—*Homestead*.

As in time of war the city doubles its guards so does Jesus multiply the display of his affection when his chosen are besieged by trials.

A Paris Sunday.

The efforts of anti-sabbath men (says the *Journal of Commerce*) are directed to the introduction of a holiday observance of sacred hours. The "National Sunday League" of England, and corresponding organizations in this country, act on the principle that the most plausible and effective way of destroying the divine institution is to appeal to the love of pleasure. It is well, then, to study the character and influence of the "recreative Sunday" to be substituted for our day of rest and worship. The last document of the New York Sabbath Committee—*The Sabbath in Europe*—furnishes welcome light on this point. The residence of the Secretary for two years in the Old World afforded opportunity for accurate information. The following extract will show whither we shall drift if we give up our Sabbath for a Continental Sunday:

"A Paris Sunday has become proverbial for its godlessness. Passing along its clean and beautiful streets, you find the cafes and restaurants crowded with men, taking their morning meal and reading the newspapers of the day. Cries of fruit dealers and street-vendors are every where heard, though the needless abomination of crying newspapers is not tolerated, even in Paris. Paviers, masons, roofers, painters, all kinds of mechanics are engaged at their usual avocations. Places of business are universally opened till mid-day, as on other days. The whirl of cabs and omnibuses is even more constant than during the six days of the week. I had the curiosity to count the vehicles passing the Industrial Palace, Champs Elysees, mostly going to or returning from the Bois de Boulogne, in the afternoon of the second Sabbath in August—the grand fete day at Cherbourg, when Paris was emptied of the elite of fashionable society—and found the average to be one hundred and forty a minute, or one thousand six hundred and eighty an hour! The grand water-works at St. Cloud and Versailles play only on Sunday. As the day advances the gardens of the Tuilleries and the Champs Elysees present a scene of unrivalled gaiety and folly. Bands of music execute lively military and operatic airs. Gaudy booths are surrounded with crowds of men, women, and children, absorbed by childish sports. Automata too silly for the amusement of infants serve to delight other groups of soldiers and stragglers. Goat carriages and whirligigs of wooden horses or mimic ships divert the children and nurses. As the evening sets in the out door concert and drinking saloons flaunt their attractions; brilliant mirrors reflect the fanciful gas jets; singing men and singing women, accompanied by orchestras below, amuse the multitude with comic and sometimes immoral songs. Every conceivable device for drawing the people away from home and from God is employed. The Cirque de l'Imperatrice furnishes its equestrian attractions and mirth-inspiring exhibitions. Adjacent public gardens are thronged with dancers. Operatic and theatrical amusements add their seductive performances. The whole line of the Boulevard is filled with people seated in front of the cafes, sipping their brandied coffee, playing dominoes, or gazing at the promenaders along the broad pavements. Houses and homes (if there be such a thing, without the name, in France) seem to be emptied into the streets and places of amusement, and the city is converted into a pandemonium of folly and of genteel or gross dissipation."

"Since the accession of the reigning dynasty, Sunday labor has been suspended on the public works in France; but I observed that the stupendous preparation for the Emperor's fete day fireworks in the Place de la Concorde were in full progress on the second Sabbath in August, the fete occurring on the succeeding Sunday; but on Monday the Sunday workmen were not there, either because dissipation or over exertion compelled a day of rest."

"Such, without more of detail, is a Paris Sunday. In the light of reason, and of the Bible, and of eternity, how does it look, and what are its fruits? Are they not found in the thriftless condition of the vast *proletaire* population, living from hand to mouth, restless in spirit, ferocious in temper, kept from rebellion by a numerous soldiery, or quieted by government labor and food? May they not be seen in the dwarf stature, and pallid aspect, and wretched inefficiency of the laboring classes, and in the 'blue Monday' records of the employers or of the magistracy; the Sunday's dissipation disengaging thousands from Monday's occupations or sending them to prison? Can they not be traced in the general debasement of private, commercial, and political morals, whatever cover the refinement and high civilization of Parisian life may throw over the inconceivable iniquity of its social condition; in the loosening of conjugal bonds, the utter loss of a home day, and of all the restraints and joys of home life; in the prevalence of godlessness, irreligion, and infidelity; and in the ascendancy of civil and spiritual despotism? Better would it be for Paris, for France, for the Continent that no distinction of days were recognized, and that the tide of life were to roll on without cessation, than that the Lord's day should be thus perverted into a day of sinful folly and universal demoralization. Ceaseless occupation, with all its physical evils and enervating influence, would be less disastrous than this devotion of sacred time to godless pleasure."

Messrs. Wickling, Swan and Brewer of Boston, have sent us the prospectus of a library edition of Worcester's quarto Dictionary, which is to appear about the first of May next. Many of the scientific and technological terms will be illustrated with wood cuts, a new feature in a dictionary. There are also various other improvements in the method of the work that will make it a most valuable aid to the library.

To Farmers' Wives.

I do not claim, Mrs. Editress, that my "thoughts deserve to live," but I have been thinking much of late about the pecuniary difficulties of farmers' wives.

I suppose wives generally are dependent on their husbands, to a greater or less degree, for the means of defraying household expenses, but do they not sometimes feel the blush of wounded pride, if not of indignation, mantling their cheeks at the evident reluctance with which such means are bestowed? Husbands can not see these matters as wives can, because of their greater independence in money matters, but no truly good husband will make his wife feel her dependence, or degrade her to the rank of a beggar by compelling her to explain every little necessity, and just how bad she wants it, before she can convince him that she is not extravagant.

No good wife will withhold anything from her husband, which can by any possibility affect his happiness, if it is even of a very trifling nature; but then he cannot understand every household want. And worse than all, how frequently is the rich farmer's wife compelled to run in debt at the village store, (or do without the necessities of life), a practice, I am well convinced, fraught with more evil than anything else in the whole range of our domestic economy. Many a wife's heart is made sore by the reproaches of her husband when pay-day comes, as come it will, and all this might be avoided by a little forethought on his part.

Now I do not wish to get up a quarrel with the men, farmers especially, God bless them! (Though, if this disjointed article should be fortunate enough to see the light, I may bestow a few stray thoughts on them). Nor do I wish to advocate separate interests of husband and wife, but this one thing I do advocate, that she should have the control of her household expenses. And now, while the business of the year is being closed up, and arrangements are being made for the coming year, let us see to it, and insist upon it as our right, that we have an income, be it much or little, but in proportion to the general income of the business in which our husbands may be engaged; let us have it so that we can rely upon it, and spend it where we can make it go the farthest for the comfort and good of the family. I think that if this could be brought about, the necessity of the toil-worn wife and mother "consuming the midnight oil" in repairing old garments would be much less frequent.

A FARMER'S WIFE.

Utica, Mich.

The Fashions for January.

To be well dressed is essential to good taste and good breeding. An utter indifference to it argues a deficiency in one or both, and an abnegation of the beautiful, unaccountable with the American mind. There is a style suitable for work, for study, for the street, the home circle, and the resorts of fashion. We observe this Winter, while high rich colors are in much demand, the most elegant costume for the street is black. This is as it should be. Black or dark neutral shades are more genteel out of doors than any colors. Taste, economy, and good judgment must dictate for other occasions.

We observe ladies are beginning to wear prints, ginghams, and muslins for home, much more than in former years. As these are capable of washing, we regard them as decidedly preferable to silks or delaines.

We observe a decided improvement in the sleeves of the ladies. Formerly, we have been pained at the sight of blue arms, gleaming out by the side of furs and velvet, of a cold winter's day; at present, the walking sleeve is in the bishop form, gathered at the waist, with a small cuff to turn back. The flowing sleeve holds its place in the parlor.

The basque is not quite in former demand being nearly superseded by the pointed waist. For full dress, a point in front and back is made, and even over the hips, where the figure is full.

Trimming materials are broad and mervine. The side stripe is no longer imported, but will retain its place for some time to come being genteel on all occasions. A double skirt, the upper skirt to fall just below the knee, and both trimmed with broad quilled ribbon or velvet.

The cloak is a Raglan slightly modified, the sleeve being elegantly curved, and adorned with tassels at each point.

We observe a new saque, slightly loose in the back, indicating rather than defining the waist, as in the large basque, is becoming a favorite.

There is no diminution in the size of the hoop. Skirts for the street just clear the ground; for the parlor they are made long, to lie upon the carpet; indeed, very nearly a train.

We hope the Balmoral, or woollen petticoat, will gain ground for walking. It has a look of comfort which we much like. Besides, it does not absorb the moisture of the street, nor suggest untidy ankles, the need of a bath tub, and the urgencies of soap and water. Embroideries and fine linen for the house; but a true lady does not make herself noticeable in any way by her street dress, unless it be for simplicity and appropriateness.

Thick shoes are decidedly fashionable. Plain, subdued gloves, to match the dress, or make a simple contrast.

Fine point lace, which is too expensive for ordinary purses, has become essential to an

expensive wardrobe. Ladies have adopted the style of wearing black velvet collars and cuffs, which have a fine effect.

The head is dressed low in the back, with folds or braids around the face, or curls, as most becoming. Flowers, velvets, or chenille, arranged to the taste of the wearer.

One of the latest reports we have seen from Paris, on the Winter fashions, says: "The bodies of walking-dresses are made high and buttoned in front. With these, basques are scarcely ever seen; rounded bodies, with a band and buckle, or a ribbon sash fastened in front, being the style now in favor. Sleeves are generally worn open and large; but for the winter costume a closed sleeve, with a wristband, will be adopted. Moire antique, in black or colors, still retains the favor it has so long enjoyed. This material is also much used for trimmings on burnous. There are new-fashioned taffetas of a rich quality: the ground is white, with checks rather more than half an inch in size, formed by fine colored threads. Around the bottom of the skirt are three plain stripes. Flounces have replaced double skirts; these are generally only two, either plain or festooned, or else one very deep flounce, surmounted by five small ones of two or three inches deep. The skirt is extremely full, and very long behind, almost forming a train. Under-sleeves are profusely trimmed with puffs, ribbons, velvet, and lace, and are generally closed with embroidered revers, ornamented with lace, on which narrow velvets are run, and lace barbes of puffs run up the sleeves all round. For negligee, collars and sleeves are made with flat plaits and Valenciennes trimmings. The Winter bonnets will be made rather larger than those worn during the past year; the front comes further forward, and the crown slants off behind. The curtain is wide, round and not raised at all. The very wide and long strings are often bound with a piece of velvet or ribbon of a different color. The inside trimming continues to be an Empress knot of foliage or ribbon, or else a half-wreath of flowers.—*Great Republic for January*.

Household Varieties.

Mrs. METTA VICTORIA VICTOR, late Miss Fuller of Ypsilanti, in this State, is now editress of the "Home," an excellent monthly magazine, lately edited by Mrs. Arey, of Buffalo. The Home is published simultaneously in New York and Buffalo.

Tribute to an Artist.—At a fire in Boston, a month or two since, Miss Jane Stuart, an artist, daughter of Gilbert Stuart, the distinguished painter of the portrait of Washington, had the misfortune to be "burnt out," with all her effects, including many of her most valuable canvases. Fortunately her copy of her father's famous picture had been loaned for an exhibition, and so escaped the flames. A number of gentlemen in Boston have subscribed eight hundred dollars to be paid to her for its purchase. The picture is to be presented to the Mechanics' Charitable Association of Charlestown.

Effect of a French Education.—Colonel Thorne, a New York millionaire, who could not get his family sufficiently educated in this country, seems to have had fortune with his family. The New York Post says:

One of his daughters, marrying against his will, became an opera singer, and at last accounts was gaining her living by singing in South America. Another daughter, who married a French Baron, (the same lady, by the way, who is represented as the type of American beauty in Winterhalter's picture of the Empress Eugenie and her court), has, in conjunction with her husband, instituted a suit against her father, to recover a promised dowry.

The late daughter of Madame Roland, the famous revolutionary heroine, bequeathed the manuscripts of her mother's memoirs to the Imperial Libraries. They have been deposited there.

For Our Young Friends.

Little Riddles.

My first is a conjunction,
My second is a parent,
My third is a worn out garment,
My fourth is a personal pronoun,
My whole is a vegetable valued as a spring delicacy.

The name of a periodical published in Ohio is made up of wickedness upon wickedness, an insect, and a personal pronoun; and its editor's name is composed of a vehicle and a letter.

Miscellaneous Enigma.

I am composed of nine letters:

My 8, 6, 9 is a part of the human body.

My 1, 3, 6, 5, is a part of a bird.

My 2, 4, 8, 9, is a river in Prussia.

My 9, 8, 4, is a color.

My 1, 6, 7, is a domestic animal.

My 7, 2, 6, 4, is a reptile.

My 7, 5, 2, is a number.

My 5, 6, 9, is what some delight in.

My 8, 6, 9, 3, is a title of nobility.

My 6, 5, 3, is a tool.

My 2, 4, 9, 7, is an ancient weapon.

My 2, 4, 4, is something odd.

My 8, 8, 4, 8, 9, is a shrub.

My 8, 6, 4, is a name given to a boy.

My 7, 6, 9, is a fluid.

My 1, 2, 8, 3, is a mineral.

My 9, 6, 7, is an animal.

My 5, 6, 7, 8, 9, is a noun which

My 1, 2, 3, 4, describes.

My whole is a town in Michigan, famous for its fast horses and fine cattle.

MARIETTA PORTER.

Batavia, Mich.

Answer to Charade of last week, CANDLESTICK.

Answer to Miscellaneous Enigma, GEORGE ROMAN BOARDMAN.

Answer to Geographical Enigma, MAJOR GENERAL DEKALB.

